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TOM CRINGLE'S JOTTINGS.

JOTTINGS

OF AN

INVALID IN SEARCH OF HEALTH,

COMPRISING

A RUN THROUGH BRITISH INDIA AND A VISIT TO SINGAPORE AND JAVA.

60059

A SERIES OF LETTERS REPRINTED FROM THE "TIMES OF INDIA."

BY

TOM CRINGLE,

AUTHOR OF "HINTS ON HOUSE-BUILDING" AND "LETTERS ON PRACTICAL SUBJECTS."

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TO

H. E. SIR BARTLE EDWARD FRERE, K.C.B.,

GOVERNOR OF BOMBAY,

THESE JOTTINGS

ARE RESPECTFULLY DEDICATED

By the Author.

PREFACE.

THESE "Jottings" were written expressly for the *Times of India*, in which journal they first appeared. I subsequently contemplated reprinting them in the shape in which they are now presented to the public. Their title is apt to mislead the reader who for the first time sees it; and judging from the general repute of "invalid's" books, it is likely that in some instances mine may receive a summary judgment of condemnation from its title alone. Let me assure the reader, however, that these "Jottings" are an account of what I saw and did at the various places I visited. I do not pretend to any literary excellence; the incidents of my travel, which were interesting to myself, and which I hoped would be informing to others, I jotted down; and I have also supplied information which will, I am sure, be found of service to intending travellers.

My contributions to the *Times of India*, extending over several years, have passed under the *nom de plume* of "TOM CRINGLE;" but in this formal introduction of myself to the reader, I superscribe my inherited and humble name,

WM. WALKER.

Bombay, August 14th, 1865.

P. S.—I close my Indian career this day, after a very diversified and chequered residence of twenty-nine years.

CONTENTS.

No.		Page.
1.	GALLE	1
2.	MADRAS	4
3.	CALCUTTA	8
4	Ditto	13
5.	CALCUTTA TO AGRA	17
6.	Ditto	20
7.	AGRA	25
8.	Ditto	30
9.	AGRA—THE TAJ	32
10.	TOMB OF ACBAR	42
11.	FUTTEHPORE-SIKREE	48
12.	Ditto	53
13.	Ditto	57
14.	Ditto	63
15.	CAWNPOOR	73
16.	LUCKNOW	77
17.	RETURN TO AGRA	90
18.	AGRA TO DELHI	93
19.	DELHI	99
20.	DELHI TO LAHORE	115
21.	LAHORE TO MOOLTAN	119
22.	DOWN THE INDUS	123
23.	Ditto	131
1.	KURRACHEE AND ITS HARBOUR	139
2.	BOMBAY TO PENANG	151

No.		Page.
26.	SINGAPORE	158
27.	BATAVIA	163
28.	BUITENZORG	171
29.	SOERABAYA AND PASOEROEAN	180
30.	COLOMBO	192
31.	COLOMBO TO KANDY	200
32.	KANDY	205
33.	NEILGHERRIES	212
34.	COCHIN	223
35.	COCHIN HARBOUR	229
36.	CARWAR	237
37.	Ditto	241
38.	Ditto	247
39.	FALLS OF GAIRSUPPAH	252
40.	GOA	263

JOTTINGS

OF AN

INVALID IN SEARCH OF HEALTH.

GALLE.

No. 1.

I am tempted to give you a few inklings from here, notwithstanding a capital letter that appeared in your paper about six months ago, which nearly exhausted the subjects about which a passing stranger can write. Let me first say that, from the time we left Bombay, in the P. and O. Company's S. S. *China*, at 9 A. M. on the 29th August, until we arrived here, we had fine, gentle, trade-wind-like breezes, and had studding-sails set alow and aloft. For a short time the wind even shifted ahead on a S. S. E. course. I merely mention these trifles to show that at this time of the year the monsoon is quite local in its action. We arrived off this port at sun-down, consequently too late to enter: so boxed about till daylight, when we discovered the *Malta* with the mails from Suez. The pilots of this port are the easiest going mortals I have ever known; time is of no moment to them, if one may judge by the quantity they consume in boarding ships. There is no doubt this port might be made a good snug harbour if the convict labour of Western India were concentrated here, to work for a few years, in lieu of employing expensive freight to send them on an aimless work-errand to our more distant colonies. The entrance to the harbour is contracted, and must, I think, always remain so; but as it is straight, and the passage between the reef short, it is devoid of all danger to steam-ships; and, as the usual sea breeze must be on the quarter or beam, sailing vessels are pretty well under command. The eastern side of the harbour, being the largest, offers the best site for protection by a breakwater, although the farthest from the town, which latter, no doubt, had its growth from its more ancient predecessor, in the old times when

only a few Arab buggalows used to visit it annually. A breakwater could be easily made here, as it would have the living reef as a windward base; and the harbour is not overdeep to increase the magnitude of the work. The rise and fall of tide is only some two or three feet; therefore a couple of lines of railway with three ballast locomotive engines and tip-waggons, would complete the work in five years, if the labour was well organized. Good warm barracks should be built for the convicts, who should be well and nourishingly fed, and warmly clothed; and, by the beard of Mustapha, with these encouraging accessories, they should work, and work hard too! I would allow them tobacco and many indulgences for good labour. The suicidal policy of expecting work—good, hard, honest work—from half-fed, half-clothed, half-housed, broken-down wretches, would prove degrading to a practical mind. Good conduct (*i. e.* hard labour) should entitle such of the convicts as were not heinous felons to a free pardon on the termination of the work. It is possible also that rock cuttings thrown to spoil on the Ceylon railway close by, if at all handy, might be made available. The extensive convict colony on the Andamans might be more profitably employed on a noble work of utility which would last to the end of time, than to keep sentry over their pumpkin plats there, leading an aimless life, if we except the torture of human hearts. Were I a convict to-morrow, I should despise a government which did not employ my labour on profitable and durable objects. How I should like to have a tyrant's power!

The usual style of buildings here put me in mind of those in and about Mahim woods; and as there are a large number of Portuguese here, I dare say the style—or more properly speaking the absence of style—is due to them.

The first object which arrested my attention on reaching the shore were the materials for the lighthouse on the Basses. The foundation stones are cut from Aberdeen granite, and from their size, quantity, and workmanship, I do not think the Government erred in bringing them ready fitted from England, as the work would never have been executed here, except at an enormous cost and endless time, skilled labour of this kind being so very scarce. The superstructure is iron, the same as the Galle lighthouse. After all, the lighthouse is not to be erected on the Basses, as it is so near a-wash, with an ever restless sea, that great difficulties would have to be encountered in getting in the first foundation course. These difficulties would find a hundred conquering contractors in England; but the people here have not the true conquering "grit" in them.

On first landing you are amazed at the apparent intermixture of the sexes, as both dress and wear their hair so much alike to the stranger's eye, that it is only the beard of the males which enables one to distinguish between the sexes. As for the boys and girls, they put guesses at sex at defiance.

The hotels here are famous for high charges. The touters come on board before you land, and look at you askance, as if they knew they were—

On nefarious thoughts intent,

and wore the well-known couplet on their breasts—

Will you walk into my parlour
Says the spider to the fly?

I should not say such hard things of them, were it not for the infamous bread in use in this benighted place. The inner consistance exactly resembles a badly made muffin; only it is insufferably dirty, and so full, not only of sand, but of genuine lumps of granite that no stranger's teeth could bear the infliction after the first essay; and I can only suppose that the European inhabitants tolerate it on the plea that it gives them a prescriptive right to demand leave of absence to England to undergo an operation for "lithotomy." Any one coming to Galle for the benefit of his health, should bring his own flour, and a baker to make his bread; or implore the captain of the ship they land from to throw on shore a bag of biscuits. During my short sojourn of two days, I put up at the Eglinton Hotel. It is prettily situated on the Ramparts; its rooms and beds are very clean, and its landlord very obliging; he is also a very griffin in guarding passengers from being fleeced by the "curiosity-box wallas." By the bye, the following may be taken as a standard rule for dealing with these men. Halve the sum they ask, and deduct fifty per cent. from the quotient; the dealer will affect to be disgusted, but will, after a little toying and coying, part with the goods on the scale quoted. I think the air of Galle would be very beneficial to diarrhœtic patients, especially those from the Deccan—the air being warm without being hot, and comes fresh and fresh across the ocean.

We leave here at 5 P.M. to-day for Calcutta by the good and fast ship *Malta*. So good-bye till you hear from me again.

TOM CRINGLE.

September 4, 1863.

MADRAS.

No. II.

We left Galle at 5 P.M. on the 4th September, and, without any incident worth relating, reached Madras on the 9th. I went ashore, accompanied by a friend, and although there is a fine pier, nothing but strong coercion would have made our Massula boatmen land us there, if we had desired, on account of a fee of two annas levied on each boat, as I was informed. This, however, squared well with my wishes, as I wanted to go through the operation of landing on that celebrated surf-beaten shore. This is very cleverly managed by the boatmen taking the boat over the first rollers, and then, watching for the *pulsative* wave, noticed for its size and curling power, they pull towards the shore like mad, so as to cause the boat to ride on its crest just before it breaks, or the boat strikes, and thus she is placed nearly high and dry like a stranded whale. As the boats are all sewn together, and are as elastic as a wicker basket, their planks and timbers creak and groan, and the passenger probably gets a good dash of spray, and a concussive shaking (as we did). You are then lifted over the wet sand by the boatmen and placed safely on *terra firma*. On the strand you will probably find a number of very passably clean one-horse shigrams, which you can hire for the day or half day at Rs.4 per diem. Native guides, who can speak and understand enough English to take you to all the lions of Madras, also offer themselves, one of whom the visitor will do well to engage, as after coaching you about all day, besides bullying box-wallas and hotel-keepers, he is amply content with his well earned Rupee. I must not forget to caution visitors that the boat fare is one rupee each, if there are only two, as in our case; and if this is all paid on reaching the shore, the boatmen will combine and ask an exorbitant sum to take you off to the steamer again, at which you may be uneasily looking, the steam probably blowing off in a roar indicatory of a speedy departure. Under these circumstances, if you have not reserved part of the landing fare, you may swallow the leek of mortification, pay, and proceed on board.

I was agreeably disappointed with the appearance of Madras from pre-conceived ideas. I had imagined it located on a sandy waste, whereas she is surrounded on all sides with railed-off expansive green, turf-covered spaces, edged with trees full of leafy beauty; and, as far as she is indebted to man's efforts, far ahead of Bombay. There is a large salt-water canal, which

encircles the city on the landward side; it is about 100 feet broad, with bridged roads, leading to the QUEEN'S GARDENS. Whoever designed these deserves great credit, for the site was evidently once a miasmatic, low marsh. But note the *modus operandi*. As it would have cost a very large sum to bring soil to raise the level of this swamp, mimic lakes have been formed by raising the garden site with the soil obtained from the lake excavations. Already there are pelicans and other water fowl to people these oases of liquid beauty. All this has been very recently changed to a scene of positive beauty, which Bombay would do well to imitate. Roads and paths are formed all over the gardens in finely designed curves. These are bordered by every variety of shrubs and flowers, while trees planted further back complete the beauty of the picture. There are also fountains—the main one is one hundred feet in diameter. Cast-iron lamp posts, of elegant design, are fixed all over the gardens. Having sufficiently feasted our eyes on this creation of beauty out of chaos, our guide asked if we would like to see the *jereefee* (?) We, never having heard the word before, asked what it meant; our guide said, an animal. My companion being a man of learning, laughed him to scorn! But as I reflected that the best way to solve the mystery would be to go and see it, we went, and lo! it was a splendid male giraffe imported from Suez. After this we were, to our great content and pleasure, taken to a very fair zoological collection. There were three Bengal tigers, two leopards, one hyæna, nylghi, spotted deer, and probably others which we omitted to note. There was also an aviary with lots of beautiful birds. A Madrassee Van Amburgh also tendered his services to go into the leopard's den, but as he first turned out one, which seemed to us as if it ought to be labelled "dangerous." Having seen the Great Original Van Am, the risk was too small to be exciting, so we threw him a rupee and left this pleasant spot. When the trees and shrubs shall have attained their full growth, it will be a source of honest pride to their indefatigable Governor, Sir William Denison, and a testimony to the public spirit of the citizens of Madras. Bombay call Madras *benighted!* Ghost of Homer! Let them trim their own dim oil-lamp and lighten their own darkness! From the gardens we proceeded to the Museum, a building of classic exterior, and filled to overflowing with thousands of objects of art, manufactures, fossils, minerals, stuffed animals, together with two or three meteoric stones, (those strange visitors from another world,) all which are well arranged and carefully labelled. Whoever visits a museum without being lost in perplexity as to which thing he shall examine? In despair of doing justice to the collection, he

hurries through room after room, and emergos from the building with his head in a buz of confused admiration, which sets at defiance any description of the riches gathered together for his enlightenment. The Museum is situated in a fine park-like enclosure, where living nature outside is in fine contrast with the dead, illustrative nature within the building. As we were just going out of the gate, I espied a monkey-house which was tenanted, amongst others, by a large black Neilgherry fellow, having grey whiskers which an old Prussian Colonel of Dragoons might indeed have envied. I had often heard stories of monkeys throwing missiles at passing travellers, but never placed credit in such tales, until I saw this old veteran here, who appeared to have the ferocity of a tiger united with the strength of an athlete gorilla. And I verily believe that were he to get loose he would have the power to kill an unarmed man. He had tusks an inch long, and two formidable rows of incisors to set off their beauty. This sable devil, in monkey shape, tore up the earth and stones within reach, and threw them at us with astonishing aim and force, and it was only by nimble dodges from side to side that we escaped being struck through the wooden lattice work of his house. As I saw that one of the battens of his cage had been broken off, I gave him some stones weighing about a pound each; these he immediately seized and sent back with a force like shot from a cannon, and which plainly showed who broke the battens. His monkeyship's dander was so raised at this period that, to assuage his fury, I threw him an old copper coin, a hundred years old, which I chanced to have in my pocket. When, presto! as if he had been newly-elected president of a Numismatic Society, he examined the coin with a knowing, comical look, turned it about and about, put it in his mouth, and instantly calmed down to a self-satisfied state of mind truly edifying. Let all visitors to Madras see this funny mad brute, this link between Bill Sykes the man, and the brute creation.

As I had always read accounts of the Madras cast-iron pile pier with great interest, I was glad of an opportunity of giving it a personal inspection. I was much pleased with it, but felt rather surprised that more attention had not been given to diagonal strut piling, to give it strength to resist concussions from ships fouling the head of the pier. I noticed that perpendicular teak timber piling had been resorted to, with a view of strengthening the cast iron piles of the T head, some of which have been taken up thoroughly honey-combed by the *teredos navalis*. In lieu of using teak for this purpose, I would recommend good Dantzic red pine, well and honestly creosoted, which will last

for half a century, unaffected by either marine borers or the action of the elements. I would also recommend the erection of a set of wrought-iron box-girder sheers on a frame, to run on rails, with the pier railway running between the sheer legs up to the end of the pier. The sheer head would get the necessary overhang to plumb a ship's hatchway by rigid iron box-girders, connecting the longitudinal frame with the sheer head. The hoisting tackle should be hung on a very strong spiral spring fixed in a short tube for the purpose of deadening shocks when anything was hoisted in a sea-way. They should be fifty feet high, with a splay of fifteen feet at the heel. The pier thus provided could take weights up to, say thirty tons, direct from the ship's hold, and put them on to railway trucks for conveyance inland.

As it was now time to proceed on board, I determined to embark from the beach in a Massula boat, for the purpose of noting how they get these big, though light, boats afloat from where they lie quite high and dry on the sandy beach. The thwarts the rowers sit on, are mere round undressed poles. Two of these are used for launching. As the boat lies parallel with the beach, a man wets one of these poles, and by boring in the sand, works the end under the keel at one end in a minute, when the crew push the boat over the slippery pole with great facility. This is done, end about, until the bow is nearly afloat at a time when a broken wave swashes up the beach. All the oars are then shipped, and, with the exception of the steerer and two of the rowers, all are seated ready to give way with a will. The three men then watch for a high wave rolling up the beach, when their shoulders go to the boat and off we are afloat. But every effort must now be made to get away from the beach as fast as they can on the retreating wave which floated them, otherwise a *curler* might throw them again on the shore, and mischief might accrue. After passing through about three or four half-broken waves, the boat emerges into safe water, and speeds on its way. These Massula boats, big and clumsy as they look, are pulled faster than that heavy abomination, the Bombay dingy. If any of the *non*-benighted citizens of Madras should happen to read these stray notes, culled entirely from memory, for the writer was too ill to write memoranda, he begs that any errors of judgment may be leniently dealt with, as he was only six hours on shore, and had not the benefit of conversing with any of the inhabitants, except the guide who showed him the *jeweefee!*

TOM CRINGLE.

November 30th, 1863.

CALCUTTA.

No. III.

After a pleasant run from Madras we reached the famed City of Palaces on the 11th September at 3 P.M., having left Bombay at 9 A.M. on the 29th August. Before we get on shore let me say a few words as to how ships first make the mouth of the Hoogly, as it is a subject many people (as in my own case before I went there) are ignorant of. The Hoogly pilot brigs are a fine class of sea boats, built of iron; and judging from their appearance at night, when I saw them, are about 200 tons burthen. One of these is stationed far out, on the Sand Heads, quite out of sight of land. Vessels coming, as we did, along the coast from Madras, generally make False Point on which is a second-grade light-house and signal mast. Close beside this is a salt-water creek or bay, in which, to my surprise (as I had never heard of this place before), were several large ships riding at anchor, for what purpose I know not—probably awaiting freight orders from Calcutta. From False Point we took our departure on the afternoon of the 10th September, apparently right out to sea, and at about 8 o'clock P.M., made the light of the Outer Pilot Brig; having ranged pretty close up to her we hailed, and obtained the course to steer which would enable us to pick up the next brig, which we did with great exactness. Thus are the pilot brigs stationed like a line of finger-posts, directing the true course to the navigable mouth of the Hoogly, until the navigation is such that the last brig furnishes a pilot; not like the rough old sea-dogs we pick up in the British Channel, but a smart, gentlemanlike man, whose leadsman even, who accompanies him, "thinks no bones of himself." The latter takes all the soundings and cries them out, sailor fashion, until the most dangerous part of the river is passed, when he is relieved by one of the ship's leadsmen. The Hoogly is far straighter than I had imagined, and like all rivers of a shifty nature, deep water is always to be found alongside bluff banks, and as far as a stranger may judge, there is not a tithe of the difficulty in navigating it as exists on the Indus. I think it, however, fair to say that our steamer, entering the river, as she did, on the turn of the flood, came up with it to Garden Reach (where the P. and O. Company's wharf is situated) in one tide. A more lubberly mess in taking a vessel alongside a deep water wharf, and that vessel with her steam up, which the harbour master (or his assistant, I know not which) made in our case,

I never saw. We only had to move about 100 feet, but the operation consumed two mortal hours, and how much longer after I left I know not, for I got wearied looking on, so jumped into a boat and landed. The P. and O. Company should let their own officers do this work, and thus save such useless detention. Directly the vessel comes abreast of Garden Reach, which is 2 or 3 miles below the usual anchorage, a Custom House officer comes on board, as in the Thames, inspects your luggage by a knowing, efficient, yet cursory glance, and with a courteous bow tells you that you are free to go on shore with bag and baggage. Close to the wharf are plenty of shigrams—here called gharries—with one, and some with two, horses attached; fare, Rs. 2 to Calcutta, two miles distant. I took up my abode at Spence's Hotel, which is supposed to be conducted on European rules, yet I could not get a pair of boots cleaned, although my servant offered to clean them, if they would only lend him the brushes and blacking, but the servants said they had no blacking! When informed of this I asked the manager if such a preposterous assertion was true. Yes, it was!—they expected gentlemen to bring their own blacking! After asking if it would not be equally reasonable to ask them to bring their own beds, I left him; a model manager for a "Limited Liability Hotel" as this is. The table is well kept, and full of good company at breakfast and dinner. At all other times the place is as silent as a Trappist monastery. When I first arrived there, at 5 P. M., I asked for a cup of tea, as I was far from feeling well, but I could not have it because they had no milk! In a word I was not impressed with the good management of this much lauded caravanserai. Perhaps these trifles would not be worth the trouble of noting, but as we Bombayites are about to start a model hotel I record these trifling facts for the benefit of its promoters; and above all let them have a reading-room, where strangers, in a strange city, may band together for social converse, and not be, as I was, like a lost dog in a fair, and thus fairly driven away from a city which has no doubt many redeeming points for the entertainment of travellers.

In walking in the vicinity of the Ochterlony Monument, I was not surprised at this being called a City of Palaces. The whole of the various roads leading across the Maidan were bordered with trees in full leafy beauty, and the buildings, with their terraced roofs seen through the opening vistas, certainly did look palatial—brick, plastered over, though they were, and all are, as they have no stone except it be brought from great distances at heavy expense. Government Place, in the centre of which is the Viceroy's Palace, has an air of great substantiality, as here

are located most of the principal shops, and public buildings, such as Thacker, Spinks, & Co., Harman & Co., Army Tailors, with splendid plate-glass doors and windows, Spence's Hotel, and last though not least is the gigantic "Hall of all Nations," into which a ragged beggar may go at one end with a week's growth of stubble on his chin, and rags on his back, but let him possess the "universal medium" he may be shaved, have his hair cut, get a hot bath, fitted with new clothes, cut in the first style of fashion, new boots, new hat, and oh, new sensation! a good dinner! And thus turned out of the other end of the building from where he entered, a finished swell of the first water. Should he be a Paterfamilias he can buy a new crinoline for his wife, together with bonbons and toys for his children! It has its coffee rooms, billiard-rooms, dining rooms, bed-rooms, wine cellars, and every description of provisions which travellers will do well to select from for a journey. They have also a steam engine to grind coffee and flour; they also make all sorts of cakes and ginger nuts; and bake excellent bread. The coffee room is nicely furnished (as are the whole of the different departments), but the coffee room servants are inattentive, dilatory, and dirty. I quote from my note book as follows: I had to wait half an hour before I could get a cup of coffee and then in small cups, without milk, dirty table cloth, and dirty knives. I called the attention of the European manager of this branch to the facts related, and he chid the servants, so I dare say he will recognise the circumstance. Here is a city, its surrounding vicinity reeking with green fodder for cattle, yet having a pretentious hotel like this who tell their customers, at a quarter to six in the evening, that they can't have milk to their coffee!

Private houses are fitted with every convenience for the comfort of their inmates, and in their table arrangements have many little conveniences which could be introduced on our side with benefit. Although our Bombay barn-style of house building is abominable to the eye, yet I do not think the thick, open, brick-work corridor, which form their verandas, are suited to an Eastern climate, as they afford little shelter from rain, and get so saturated with heat during the day, which given off at night, heats the otherwise cool air which flows into the rooms. It is owing to this radiation of heat which makes the services of the punka-wallas indispensable throughout the night too. Whereas light woodwork verandas, with Venetian shutters to shut out the glaring sun, whilst at the same time the breeze can be let in, are far preferable. When the sun goes down we in Bombay can throw open the shutters, and having no heat retaining material in their construction, can enjoy the cool evening air at a time when the

Calcutta folks in their "palaces" must either employ kus-kus, tatties, or inhale air heated as if from an oven. Like our Bombay houses, those in Calcutta have no ventilation in their ceilings, yet nothing is so easy, costless, and practicable. I laugh at a builder who makes a ceiling sixteen feet high without ventilating at the top, as all heated and vitiated air must pack itself almost dense enough to sit on until it can escape by the tops of doors and windows. Thus, for all that the lungs of the inmates are benefited, the ceilings might have been level with the tops of doors and windows.

The Government House is a handsome pile, well raised above the ground, with arched entrance gates on the faces of the square, and surrounded with greensward, kept well cut. I think its appearance may vie with Buckingham Palace when our Queen took up her residence there twenty-three years ago. It is amusing to see how the huge adjutant birds take up their roosting positions on it in the evening. They stand perched on one leg at equi-distances along the summit as if each had been placed there for decorative effect, and as motionless as if cut in stone.

Calcutta is certainly lighted with gas but gas, of such an impure, unilluminating quality, that I am surprised the inhabitants tolerate it.

I was informed that their new system of sewers is a complete failure, owing to flat levels, which all three of the Presidencies are alike subject to: this may prove a warning to Bombay. Having read the Report on the Main Drainage of Bombay by Messrs. Wilcox and Tracey, I feel convinced, that if sewers are ever to prove serviceable in a climate rainless for eight months of the year, their well-digested scheme ought to succeed. Let me direct their attention to the banks of the Indus for bricks, which with Portland cement will ensure good work. Sand traps are the great requisite. Keep the detritus of our road metalling from choaking the floors of the sewers, and half the battle will be gained.

But, to return to Calcutta. A stroll along the Strand makes one fancy we are looking at tier after tier of ships in the Pool on the Thames, for here also the ships are moored to buoys, four abreast, the in-shore ship not fifty feet from the river bank. And a most pestilent shore it is. It would outsmell twenty Cologues! The river across to Howrah, on the right bank, looks a noble stream; it is deep, and its channel is so fixed by nature that a change of bed is out of the question. If capital could be found to form a continuous cast-iron screw pile, deep water wharf, with intermediate creosoted, stout, sheet piling, along the whole length of the strand, it would give enormous facilities for discharging and loading ships alongside. The very

ground reclaimed in the operation would become so valuable as to half pay for the work, and the whole of the filling-in soil could be water-borne to the spot at a minimum cost. At present the filthy, slimy foreshore left by the receding tide, is a mixture of every abomination which the mind of man can conceive. The Thames slime banks are clean by comparison. Those of Calcutta certainly have more *body* in them! and must certainly be a latent bed of fever and cholera ready for any havoc. The river, across to Howrah, where the East Indian Railway Terminus is situated, is about half a mile wide; and considering that the terminus of this railway must of necessity always remain on the opposite bank to where the city is situated, as bridging is not to be thought of, and a tunnel under the river would not pay, I was surprised that the Railway Company had not erected a continuous and substantial wharf along their river frontage, as now it is a series of shreds and patches, and not on that broad and liberal scale which so much facilitates mercantile operations, and which is so much cheaper and satisfactory in the long run. It now looks as if some repressive mind had sanctioned little portions at a time, of that which should have had large ideas brought to bear on it, so as to create a harmonious whole. The railway terminus is a fine building in pointed brick, and is a good specimen of that class of railway architecture. It is within about 200 feet of the river bank, and as this is about on a level with the railway, it will be seen that nature has been very favourable, especially so when it is considered how easy an alluvial foreshore can be dealt with by piling. The Railway Company have fine large steam ferry-boats which run quarter-hourly from side to side with passengers either for the trains or on other business.—1st class one anna, 2nd class half an anna. There are also light pulling dingies with small cabins, which will take you across for four annas should you not like to wait for the ferry-boat. The offices of the agent of the East Indian Railway are about to be moved to the east side of Government Place, and whoever may wish to converse with this gentleman on business affairs, will come away favorably impressed with his urbanity of manner and business ability. The current of the river on the ebb tide, (for the ocean tides affect the river here) runs about five miles an hour—far too fast for an honest, navigable stream. River steam cargo-boats are, I hear, a profitless speculation on the Ganges, in proof of which the Oriental Inland Steam Navigation Company, under the able management of their new agent, Mr. Dunne, at Kurrachee, are withdrawing the best of their boats from the Ganges to put them on the Indus. From what

I could learn, the Ganges navigation higher up is even more dangerous than the Indus, owing to obstructions of transverse beds of kunkur, of which there are bars reckoned as dangerous as coral reefs. The steam boats which ply on the river up as far as Benares (20 days' passage) are fine vessels of nearly 1000 tons burthen, with cabins on the deck proper, and a hurricane deck for roof, which furnishes a fine promenade, with stretched awnings the whole length of the boat. These vessels are 200 feet long and a breadth over all of 64 feet, drawing three feet water, with all on board, besides 100 tons of cargo. Most of the boats built for Indian river navigation have not power enough, and many are deficient in fineness of extremities to get them through the water. I shall, however, have more to say about the boats employed on the Indus in a future letter.

On visiting Madras and Calcutta, I naturally expected to see busy Commerce strutting about the streets, piers, and among the shipping, but I am dealing with sober truth when I say that during the day we were at Madras, I did not see one bale, box, or cask, of merchandize going off to, or being landed from, any of the ships, nor was I more successful whilst walking about the streets. And—"tell it not in GATH,"—during the three days I was in Calcutta the only mercantile sign I witnessed was two bales of jute being rolled off a truck on the Strand quay. I did not see one ship either loading or unloading a single bale of goods. This is so different from the busy bustle in our streets, where your way is impeded nearly at every step by coolies carrying bales of merchandise from and to the piers, that I could hardly credit my senses. An honest fact though it be, I relate it with great diffidence, fearing I might be accused of *handling a weapon* I never use.

TOM CRINGLE.

December 9th, 1863.

CALCUTTA *(Continued.)*

No. IV.

Before leaving Calcutta, let me award to their Municipal Commissioners the tribute of praise for the discipline they have established amongst the cart, gharry, and buggy-wallas. You never hear a public conveyance driver abusing his fare as in Bombay ; besides this good quality, their horses, vehicles, and

harness are always decent. If we except a ricketty shandry-dan sort of shigram drawn by two wretched little half-starved ponies, and not of the Petruchian style so universally in use in our Western city; yet horses are cheaper in Bombay than in Calcutta. Before the last precious Bombay Public Conveyances Act was passed, I threw out a hint, which, if it had been acted on, would have proved an effectual cure for dirty buggies, horses which look as if they had just been turned out of the Pinjarapoor, and harness tied up with rope yarns. They should have been rated in three classes with a graduated scale of charges —the highest to charge the present fare, which is nevertheless too high by a third, as it is just 6d. per mile—the same as the dashing Hansom with its £30 horses, £55 vehicle, and ten mile an hour pace. If our dirty, saucy, indolent, creeping buggy-wallas had been checkmated by the move I recommended, they would soon have found it the most economical plan to keep a decent turnout, so as to entitle them to charge the higher fare; and also that it is just as expensive to keep an old buggy in repair, and to feed a broken down, three legged, spavined, jibbing knacker, as a sound buggy, and good horse. Whereas, now there is no incentive to keep a clean and decent turn out, as the "dirty dicks" are empowered, by the wisdom of our law-makers, to charge just as much as those who would have been placed in the 1st class. I may be excused this digression, on the chance that Calcutta, Madras, and other cities may adopt the improving hint. Mr. Forjett, our present worthy Chief Commissioner, is not answerable for this shameful state of things, but his predecessor, who in a maudlin vein of insane patronage, asked the buggywallas if they would be "dood" now and keep decent vehicles if he increased all their fares proportionately from 8as. to 12as.? Oh wouldn't they! Would the Magistrate Bahadoor only try e'm? Could they refuse to do anything for such a Ma-Bap? The fatal, foolish concession was made, but no improvement followed—nay, I declare they are not so clean and efficient as they were before folly wagged its tongue. Let us get quickly back to our proper jottings, I'm beginning to get riled. Let a cartman be caught in the streets of Calcutta, except on the extreme side of the road he may be going (thus, very properly leaving the centre to fast vehicles), and he'll catch pepper from the police. Whereas, in Bombay the carts are allowed to roam all over the road, from side to side, and centre, with the driver probably fast asleep from the previous night's debauch. This is not the worst—why do our Municipal Commissioners allow these carts to have protruding ends of axle six inches beyond the wheel naves, with which, the

drivers know, they are armed like an ancient British war-chariot, that no sahib dare drive near them. Would it be too gross an act of tyranny to keep these poor fellows awake and to make them keep the kerbstone when they are driving in the public streets? Or to make all public vehicles draw up on the side of the road, when the drivers or passengers wish to have a confab with a loitering friend? Here I am, away from Calcutta again! From enquiries made, notwithstanding the ample space for expansion around Calcutta, the prices of eligible building sites in Government Place, and other desirable localities, are nearly as high as those given for land in the old Fort limits of Bombay.

I must remark that I was not in Calcutta in the fashionable season, but I was much struck with the shabbybred horses to be seen everywhere. I cannot call to mind that I saw one handsome Arab horse in Calcutta, the majority being coarse fiddle-headed AUSTRALIANS, or a cross between the STUD BREEDS and coarse country mares, together with a wicked sprinkling of the Kattiwar, or a breed closely allied to them, of which I saw long strings in the neighbourhood of the BEAS river, each led by two men, on their way down-country.

Before I go across the river, to go up-country, let me remark that a stranger is taken by surprise at the great number of steam tug-boats employed towing ships up and down the Hooghly. They are, I think, quite as numerous as those on the Thames. Now I'm afloat, I cannot but blame the Viceregal Government, for permitting a large navigable river like the Hooghly to be *polluted* by dead Hindoos set floating down on its tide, a disgusting spectacle when carrion birds are feasting on their human float, or perchance they get foul of ship's moorings, or the paddles of steamers, when the whole surrounding atmosphere is poisoned in the efforts made to push them clear. Ghost of Arabian ghouls! Why not pass a law to stop this? Either *burn* or *bury* should be the order. Talk about my plan for converting dead Hindoos into gas to light our streets as being horrible! Eh, you critics, which is the most horrible, the above picture or my plan?

I trust that such of your readers as may honour these jottings by perusing them, will not think I offend against good taste, if I give some few hints connected with preservation of health, as illustrated by the illness which caused me to seek change of air; as many may derive the benefit which I experienced, from the deductions I arrived at to attain that desirable object. My general health in Bombay had always been remarkably good, excepting that I could not get more than from two to three hours' continuous sleep at night, and if I had experienced any-

thing to cause mental excitement the preceding day, I often passed an entire sleepless night. This continued for two or three years, and had not nature endowed me with a fair share of nervous energy, my health must have given way long before it did. Just before I fell ill I increased in bulk, then ensued a gradual wasting away and loss of strength, coupled with sleepless nights, and with profuse perspiration on the least exertion; anon followed loss of appetite and desponding ideas of death. Nevertheless, I kept at duty, for I think nothing is so bad as a man stopping at home brooding over his sickness. Work distracts the mind from its cares, and even alleviates the feeling of sickness by keeping the mental faculties busy. During this period I had no pronounced attack, and when I went to my medical adviser, I was obliged to tell him that I did not know what ailed me, I had an instinctive feeling that nothing but change of climate would do me good. In this he at once coincided, and off I started for Calcutta; all my friends telling me that the sea-breeze on the passage down the coast would set me up. But to my surprise I got worse on board the steamer under the sea-breeze treatment; getting so weak that I could hardly stand when I arrived at Galle, where a day on shore revived me much; but I became still weaker during the four days' run to Madras. Here again I got better directly I left the healthy sea breeze (?) But I could hardly stand when I arrived at Calcutta, yet a beneficial change took place directly I landed. From these data I reasoned, that as my sickness had originated in the moist atmosphere of Bombay and increased in intensity when subject to the moist sea air, I determined to go to some central part of India where the air would be dry, and warm enough not to close the pores of the skin. Lower Bengal did not offer these advantages, Allahabad was recommended, but the broad expanse of mud banks in the Jumna, warned me off; and as I had heard much of the Taj, I decided on Agra, where I met friends, whose little boy had symptoms so exactly resembling my own, that I was induced to question him; and although he might have justly exclaimed, "physician heal thyself," yet I plainly saw that his complaint was an insidious, sapping, biliousness, acting, as in my own case, on a strong constitution which would not readily succumb to it. So I gave him a "black and a blue," which cured him; *dittoed* myself, and after an interval of three days, I repeated the dose, got rid of the blues; balmy sleep, of full measure, again was mine, which calmed the excitement of my brain, stopped a loud ringing in my ears, brought back my appetite, and although I did not attain my former stoutness (which I think was only a sign of disease),

yet I rapidly got back my strength. I daresay many of your readers may laugh at all this, yet though it may be fun to some, it was nearly death to me, as I had not the most distant conception that I was, and had been so long ailing from a bilious attack. I had no outward symptoms of it, nor felt any; yet it was my only complaint. My excuse for thus describing my case is, that wise men may realize healthy hints from it. To such as may have my symptoms I say—go to Central India, Kurrachee, or Egypt, or where dry warm air can be found, and above all, avoid "the healthy sea-breeze you know."

I start from Howrah at 8.35 P.M. by the night mail train for Jumalpore—398¼ miles; fares, Rs. 27-15 first class, and Rs. 13-15 second class, and as I wish to get a little sleep before starting I will bid you good night.

TOM CRINGLE.

December 14th, 1863.

CALCUTTA TO AGRA.

No. V.

As intimated in my last letter, we were to leave Calcutta at 8.35 P.M. for Howrah, on the other side the Hooghly, whence we started per train at 9 P.M.

The construction of the various classes of carriages are as like those of the Great Indian Peninsula Railway as two peas, except the first class, which on the E. I. Railway are the old English every-one-in-his-own-seat, elbow, and cushion backed style. Some one or two I saw with the elbow divisions taken out; thus showing signs of transition towards the saloon carriage, which is certainly the most suitable for a hot climate like India.

The Great Indian Peninsula Railway passenger rolling stock is far ahead of the E. I. R. in point of exterior finish and cleanliness. The latter look as if the brass handles and panels of the carriages never got a cleaning. The lamps also quite rivalled the G. I. P. Railway in being badly trimmed, leaking into the lamp glasses, and going out. I was, however, much pleased with the orderly and quiet way in which the business of every station was conducted, either by night or day. Every one appeared to be at his post to fulfil his duty in a calm and sober manner. The parcels are way-billed and counted over to the guard in the most careful manner. The speed of the trains is always about 30 or 35 miles per hour, and the time kept is

perfect. It should be borne in mind that the East Indian Railway is practically a dead level from end to end, which makes time-keeping an easy matter when compared with the G. I. P. Railway strewn with steep gradients up to 1 in a 100. The natives are not allowed to shout and make that dreadful din, either outside or on the platform, which they do on our side; neither are the native station-clerks so abrupt and uncivil to the poorer class of passengers. A great deal of matter founded on these remarks may be owing to a difference in the manners and temperament of the people themselves, who are certainly more courteous to their superiors, and to each other, than the natives of Western India. One thing cannot but strike the most casual observer, as to the fact of there being so very few representative men amongst the natives. They all appear mixed up into one common herd of worldly status. You never hear of any leaders corresponding to our Jejeebhoys, Jehangirs, Camas, Sunkersetts, Bhow Dajees, Mungaldass Nathabhoys, Callianjee Sewjees, and Sassoons, as with us in Western India, men who, by a wise distribution of a portion of their wealth, enterprise, and learning, in fostering education, and public endowments for citizen purposes, have all left their footprint of liberality in their wake. Bengal may possess isolated similar benefactors, but she cannot show that long roll of public benefactors whose names are household words with us.

I was much pleased with the marked taste and fitness displayed in the station architecture over the whole of the E. I. Railway. There is a touch of beauty and design for even the commonest shed, even the pointsmen's lodges are built in the cupola style, which are at once cheap, durable, and handsome. And to show the fitness of their stations for traffic purposes—both passenger and goods—I may observe that I never once saw from a passenger platform a sign of goods traffic, so effectually are they separated. With very few exceptions, all their station buildings are built in pointed brick, and all are planned on a liberal scale, so as to ensure the duties of the line being carried on with methodical exactness. There was a place for everything, and everything was in its place. Some of the stations, such as Howrah, Jumalpore, Benares, Allahabad, Cawnpore, Allyghur, and many others, are, in extent, convenience, and architectural style and fitness, equal to some of our metropolitan stations in England. In a word, the station architecture of the Bengal lines of railway cannot but form a standard pattern for improving the taste of the natives, in details of building and neat accurate brickwork.

The railway is particularly well laid and even, yet except in the neighbourhood of Monghyr, where rock ballast can be pro-

cured, nearly all other ballast has been manufactured from burnt earth and refuse brick, also from kunkur, where beds of it have been found plentiful along the line. All the fuel used on the line, from Howrah to Benares (540 miles), is Burdwan coal; and all fuel used from Allahabad, upwards, towards the N. W. Provinces, is wood; on this portion of the line every engine is provided with a triangular shaped cow-catcher, which, without bagging animals, trips them up and thrusts them on one side. Every engine also is provided with a spark-catching chimney, but whether they are effectual or not, I could not satisfactorily learn.

I may here mention that I saw a novel sight along the line from Allahabad, till night closed in. This was nothing less than cream colored granite, or sandstone electric telegraph posts, about 14 feet long, and as stout as our squared-up teak posts. They are obtained from Chunar, a place some little distance down the Jumna, below Allahabad, famous for its variety of beautiful building stones and marble; but in this respect I believe Jeypoor is singularly rich in the beauty of its marbles, agates, cornelian, jade, and especially steatite, or soapstone.

A traveller on the East Indian Railway is often taken by surprise, by learning for the first time, that certain stations which he thought were located on the main line are really on branch lines. I will give particulars of these.

1. RANEEGUNJ BRANCH.—Diverges from the main line at BURDWAN, 67½ miles from HOWRAH. Goes on to MANKOOR, PANNAGHUR, to RANEEGUNJ, 121½ miles from HOWRAH.

2. RAJMAHAL BRANCH.—Diverges at Teen Pahar, 196 miles on to Rajmahal—203¼ miles from Howrah.

3. MONGHYR BRANCH.—Diverges at Jumalpore, 298¼ miles on to Monghyr—303 miles from Howrah.

4. BENARES BRANCH.—Diverges at Mogul Serai, 534 miles on to BENARES—540 miles from Howrah.

5. AGRA TERMINUS BRANCH.—Diverges at TOONDLA, 266½ miles from ALLAHABAD;* on to Agra 13¼ miles, where the terminus is close up to the left or east bank of the Jumna. The fort and city of Agra are on the opposite side of the river, which is crossed by a bridge of boats.

The ALLAHABAD section is now only finished to ALLYGHUR,

* The reader must bear in mind that the line from Allahabad towards the North-West, although under one agency with the E. I. Railway, possesses a separate upmanagement staff; there being now a hiatus of 70 miles of railway, which is under construction, between Mogul Serai, where the Benares branch diverges, to Allahabad; and to reach the latter city, which is on the left bank of the JUMNA, this formidable river, which looks half a mile across, will have to be bridged before the G. I. P. Railway can be in rail communication with HOWRAH.

315 miles from Allahabad *en route* to Delhi, 76 miles beyond. This portion is under active construction, but Delhi also is situated on the farther, or right bank of the Jumna, which is now crossed by a bridge of boats, as are all the great rivers leading to large cities, except the Ganges at Allahabad, where the river is so broad, with its stream divided into two branches, one at either side, and with broad patches of mud and sandbanks intervening, that bridging by boats is impracticable: so the streams on either side are crossed in huge ferry boats, which are partly pulled and partly poled from side to side; the dawk gharries being pushed across the shoals by coolies. Thus to cross this formidable stream at present, the horse is left behind and the gharry pushed up on planks to the first ferry boat, and after crossing a very rapid current, is again landed on a broad muddy shoal, over which it is pushed by coolies to the second branch, when it is again loaded on to a ferry boat, and at last disembarked on the Allahabad side, where a horse is put to, and after a drive of about four miles the station is reached. It will be a happy day for travellers when the railway is completed from Mogul Serai to Allahabad. It has, since I was in that part of India, been opened from Mogul Serai to Mirzapoor, and will, in a few months, be opened to the South bank of the Jumna, opposite to Allahabad. The East Indian Line does not anywhere cross the Ganges.

For obvious reasons I abstain from attempting to describe towns along the line of railway. It is in fact quite out of the question to expect it from the cursory glances a railway traveller can obtain. Bishop Heber, moreover, has done this too well for my humble pen to essay the task. Nevertheless, I could not but see that native towns and native huts are as like as peas all over India, if we except the great show cities on the banks of the Jumna and Ganges. I shall have something to say of the famed buildings in the neighbourhood of Agra in a future letter.

TOM CRINGLE.

December 23rd, 1863.

CALCUTTA TO AGRA *(Continued.)*

No. VI.

On my way up by train on the morning after leaving Howrah, when daylight revealed the country around, I was disappointed with its aspect as regards fertility or adaptation for agriculture, until we reached Jumalpore, a distance of 296 miles. All ap-

peared waste marsh or lagoons tenanted by water-fowl and crocodiles, many of which were rudely awakened by the shrill engine whistle, which caused them to scramble, terrified, over the surface of the water. On the right ran the broad, though shallow, Ganges, crowded with large boats rigged with a big square sail and top-sail above, which, in the magnifying morning mist, made them look like a fleet of war-ships sailing up to attack a fortress.

When the morning sun had fairly dispelled the fog, and the eye ranged on either side far as the scope of vision could span the immense alluvial valley spread before it, my mind was lost in wonder in the great fact that the whole of this vast mass of matter should have been borne by myriads of tiny rills down the slopes of the Himalayan range, poured into the river arteries, and then spread out by the sea, which once bounded the base of the hills, into the vast level expanse before us. Our wonder is indeed intensified when we know that this great valley is a thousand miles long and five hundred miles broad. In going through this country the traveller often sees high mounds of mixed sand and clay which were, countless ages ago, shoals in the beds of rivers which now pursue their erratic course many miles away. The country I chiefly passed over when travelling by dak, when I could look about me, is watered by the Jumna and Ganges, both of which are mighty rivers in their breadth and power of devastation; their soil is composed of a mixture of sand and clay, of a light drab color, and saturated with nitre. In well sinking, it is quite a chance whether the water will be fit for drinking purposes or not. As the soil readily absorbs rain water, I expected to find water in the wells somewhat near the surface, but was surprised to find it some 35 or 40 feet deep; this stimulated enquiry, and I looked into every well I conveniently could, over a large expanse of country, but found the depth, as far as the eye could judge, exactly the same. From this I conclude that the porous earth permits the descent of rain water to the level of the surface of the great rivers, and is thus kept at such a uniform level by their resistant pressure.

I think this theory will equally apply to the wells lying between the great rivers in Guzerat. I mentioned that the soil in the valley of the Ganges and Jumna is saturated with nitre: to such an extent is this the case that walls built of bricks that are not burnt, and the nitre in them not thus chemically changed, are regularly well eaten out, by the wet causing decomposition; from the same cause plaster peels from the walls quite rotten. I was told a tale about using the subsoil plough near Agra, which is worth repeating; with a view of bringing to the surface a virgin soil that had never yet yielded tribute to labour, the earth was

ploughed up very deep, and duly sown, but nothing sprang up but strange, nitrous imbued plants which were anything but a welcome sight to the experimenter. The fact elucidated was, that the old surface had received so many ages of monsoon washings that it was comparatively free of nitre, but which the plough stirred up from its barren bed. I had the pleasure recently of seeing at work, near Byculla, the steam plough imported by His Highness the Rajah of Jamkunda. This experiment I have no doubt will meet with the reward it merits, and unlike the Agra experiment, let us hope it will bring to the surface a fruitful virgin soil to relieve the old top surface which has for ages yielded its annual crops without receiving an ounce of manure. This enterprising prince who has thus enlisted foreign science to improve his land, and enlighten his people, deserves great credit. He is the most intelligent and *bonhommie*, frank, native gentleman I have seen in India: may his shadow never grow less!

All the roads in Bengal, and in the North West Provinces, together with the Great Trunk Road which runs from Calcutta to Lahore, some 1,300 miles, with branches probably of equal length, are, with very few exceptions, all made with *kunkur*, which I may explain, for the benefit of the uninitiated, is a combination of two parts carbonate of lime and one of clay. Beds of this are found, sometimes in the raised mounds I have alluded to as being old river shoals, and it is also dug for in the soil, wherever its presence is indicated by the poverty of surface ground. In Western India we find the same kunkur on the surface of the mountain ranges of the Deccan, and of which all the lime used there is made. In parts of Sinde it is so rich in pure lime of the finest quality, as to reach 96 per cent. As road metal it is without a rival. No stone will make a road at all equal to it. The method of metalling a road with it is as follows:—One half only is done at a time, and the division in the centre is marked by running a line, along side of which a pile of earth is laid about one foot broad and six inches high as a boundary against which to lay the kunkur, which is in shape, and somewhat in appearance, like irregular branches of white reef coral: this is laid on about four inches thick, and very evenly levelled by the hands of women and children. It is then well watered and beaten down by heavy wooden rammers; the men who do this stand together as thick as they can work, so as to ensure that every inch of space shall be well consolidated. This done the road is again and again well saturated with water and covered with large, heavy bushes, and tree limbs, to keep vehicles off. After two or three days these are removed, and it

is surprising how the roads bear their first traffic with scarcely an indentation. In a week the nodular ends of the pieces of surface kunkur are worn down to one uniform level, smooth as a billiard table, and a luxury to ride over, for not the least vibration is felt, as on stone metalled roads. That they are easy for the poor hard-worked dak horse is seen by his ability to drag a large shigram with, say, two hundredweight of luggage, and sometimes five sitters, at an average speed of seven miles an hour, over seven-mile stages; and when it is considered that these horses are poor, ill-bred, ill-fed, ill-used, ill-groomed, ill-driven, and undersized, it speaks volumes for the splendid roads of Bengal. But by careful watering, and an occasional rolling, as I saw at Lucknow, kunkur roads can be made with a surface hard and polished like cement; wheels run over them scarcely leaving the faintest imprint. Lucknow, I observed, uses pounded brick under the kunkur, with good effect, as it will not retain water to sap the surface crust. Sometimes brick is largely used with kunkur for bye-roads, and wears very well. I would recommend our rich men to use kunkur metalling on the approach roads to their bungalows. They are very durable (more so than stone metalled), and even if not watered, they give off little dust, but if watered, they are perfection. We have so much rock on every hand throughout Western India that I fear our roadmakers will never search for kunkur beds, otherwise I have seen, in the valley of the Malsej for instance, similar drab coloured earth which yields the kunkur of the Gangetic valley. Our roadmakers will best be able to ascertain whether kunkur can be found and laid down as metalling as cheap as broken trap rock.

It may interest many of your readers to know how the great rivers in Bengal are bridged over with boats. Those used for this purpose are about forty tons' burden, and poor, rickety, ill-put-together vessels they look, yet I did not notice that they leaked; they have very flat floors, as must all vessels, without exception, which navigate the shallow rivers of the East, for if sharp built they would roll over on their beam ends the first shoal they struck on,—in fact such is the fate of our English ships which get on the shoals coming up the Hoogly to Calcutta, as the rapid currents pile up a wall of sand against the tidal side of the vessel, at the same time the eddy formed by the ship on the other side, eats away the shoal, when presently over rolls the gallant ship on her beam ends, which is nearly certain to seal her fate. Whereas in the case of a flat floored vessel, this very action of the elements creates means of escape. After this digression we must get back to our bridge of boats;—these are anchored close abreast, with the head facing the current, from one side of the river to

the other. Long stringers, or sole pieces, are laid from boat to boat, broad enough for a double road, with a light rope railing down the centre to prevent carts going on the wrong side. The sole pieces are strongly bolted together, planked over, then the roadway gets a good coating of grass or litter, on to which is put a foot thick of earth, and the roadway is complete. The grass prevents vibrating shocks, and is soft for both boat and rider. At every bridge I crossed, (and they were many,) except that over the Jumna, leading into Agra, the horse was invariably taken out of the gharry and replaced by two bullocks to cross the bridge, the fee for which is always eight annas, except at bridges like the Sutlej, which has in fact two bridges with an intervening shoal between, in which case the fee is a rupee. At some places, as the bridge over the Ganges at Cawnpore, on the other side of which the shore is very deep with sand, in which a horse in a gharry would kill himself with impatience; here also a pair of bullocks take you not only over the bridge but half a mile beyond over deep sand, the fee *two pice!* Cheap, aint it? The traveller, not the dak proprietor, always has to pay these extras. I suspect that experience has shown in some tragical occurrence, that horses, when crossing these bridges, have shied, and bolted off the bridge into the boiling current of the river, which would soon cook their goose, and the traveller too, if he did not look sharp. Let us suppose ourselves on the train which arrives at Agra at 5 A.M.; just when the golden rays of light in the East are heralding the rising sun. At that dubious hour of the morning, twilight, when distant objects put on an air of ghostly airiness strange to behold. Look then to your left front, and behold the wonder of the world, the Taj! A mountain of snowy marble, with a tinge, of cerulian blue when seen at this early hour. As the sun rises higher it will take a roseate hue most wonderful to behold. Its height is 290 feet, and the four beautiful minarets which stand at the angles of a marble platform 300 feet square, the height of which are 225 feet, only serve to enhance and complete this beautiful edifice. It is embedded in a splendid large garden of 20 acres, where the cushat dove by day, and the bul-bul by night, sing their requiem songs around the resting-place of Shah Jehan and his Empress Mumtaz Mahal.

We shall linger some time in the neighbourhood of Agra, and I trust I shall be able to give my readers some ideas of the wonders to be seen in its vicinity.

TOM CRINGLE.

December 24th, 1863.

AGRA.

No. VII.

A visitor from Bombay is entirely taken by surprise on learning that there are in the fort of this station buildings which, for nobleness of design, cost of construction, and artistic finish, are not to be equalled in the world. Most of us have read or heard of the Taj ; but what will my readers say when I inform them, that besides this, here are palaces, mosques, tombs, and fortresses, built from the loftiest conceptions of massive grandeur, and yet not one cubic inch of wood, nor one ounce of iron, enters into their construction. Although, from its magnificence and noble proportions the Taj should claim prior notice ; yet, for certain reasons, I will first take the fort, as it stands prominently before the traveller when he has reached the right bank of the Jumna, after crossing the bridge of boats from the railway branch terminus on the opposite side. The fort of Agra is built of a peculiarly tough, fine grained, red sandstone. The battlements have a very commanding appearance, being about 90 feet above the glacis. The fort ditch is about 40 feet broad and 12 feet deep. In former days it evidently had an outer wall, as there are two large and massive entrance gates still standing. I may here state that my figures are all estimations. Keeping this in view, I should think the fort cannot be less than 1½ miles in outer circumference. It has salient towers on the face, with a curtain 30 feet above the level of ditch ; and is constructed of brick, faced with the sandstone already described. All the parapets, as well as all the ornamentation employed, are in solid sandstone, which I consider quite as strong and durable as granite, with scarcely any tendency to exfoliate so common to nearly all stone.

Another good quality this very peculiar sandstone has, is, that when struck, by cannon shot for instance, it breaks clear off at the point of impact, and does not fracture its neighbouring surface. Its grain is as fine as many marbles, and owing to its toughness, it is capable of being used in huge blocks ; or in two inch thick slabs 14 feet long and 2 feet broad, as is used for Verandah roofing ; or to bear on its surface the most delicate tracery of birds, fruit, or flowers. The edges of some of these appeared as fresh and sharp as if only cut the day previous, yet they have stood the trying test of an Indian climate for three hundred years.

Altogether the fort of Agra has a most noble and grand

appearance, yet nothing would be easier than to breach it with our modern artillery, as the walls behind the stone facing are rotten from nitrous effects, and which cause appears to be sapping the strength of every building in the country, so full of nitre is the soil. The foundations of the curtain wall near the western entrance gate are defective in some places, and I think it could not have had slope enough given to it, otherwise so large a mass would not have fallen over into the ditch. The fort gates are massive, of great strength, and well planned for defensive purposes. In the days when Acbar built it, this fortress must have been impregnable; and even now, I think, a handful of Englishmen would hold it against any native army however well equipped.

Within the fort is situated the Motee Musjid (or Pearl Mosque), on which is written, in beautiful Persian characters, the following lines, and although the praise bestowed upon the building may appear fulsome in some places, yet, when you have seen this splendid mosque, you directly concede that poetic license has not been exceeded :—

This place of prayer is one of splendour,
Like the 'Bital Mamour' in the seventh heaven,
Whose whiteness is slave to the morning dawn,
From whose brightness the sun receives light.
Its strong flooring is joined to heaven,
And its dome of magnificence is joined together
Like the leaves in paradise.
Its lofty walls show it to belong to a beautiful mosque ;
Each picture of the flowers on its marble walls
Is like the stars of heaven made into a bouquet.
The fountains of the sun spring here,
Every golden pinnacle shines on it like the chandeliers of heaven ;
Its arches are filled with light
Like the moon on the night of Eed.*
On its four sides is the strong Fort of Agra,
Built of red stone, whose walls reach to heaven ;
If you were to see them you would say
They were a halo to the mosque,
Like as is round the moon
Made of the clouds of mercy of God,
And the circumference of the sun of splendour
Was a bright cloud which rained down bounty.
Truly this building is one of those from the highest heaven
And made of one beautiful shining pearl.
Before this the dazzling purity of marble was never so displayed ;
Since the creation of the world there never was such a splendid
And worship-inspiring temple.
By the orders of the most exalted King (like Solomon in wisdom),
(Like Abraham the friend of God in faith),
The civilizer of the world, whose residence will be in heaven.
On whom is the shadow of God, the foundation of the world,
The support of princes. On account of whose footsteps
The earth is most proud, and fancies itself heaven,
Distributor of the presents of heaven on earth,
With whom fortune and wealth are both in love,

* The Mahomedan festival in which they commemorate the offering up of Ismael, not Isaac; the feast is fixed by the appearance of the new moon.

And beautiful angels of heaven are his well-wishers;
Heaven even is a supplicant for some dust of this palace:
The fire of hell is an anxious expectant from the edge of his sword,
The great, the magnificent, the just, the generous,
The merciful and kind, King Acbar; by him was this
Noble house of prayer built in 1610 A.D.

The Motee Musjid is indeed the pearl, not only of India, but is peerless in the world; in its grand and pure simplicity no other building can approach it. It stands in a spacious court paved with white marble and furnished with cells on each side, whilst in front stands the mosque, whose white marble triple domes glittering like snow, and with gilded spires, rise far above the blood-red battlements on its western face. The interior triple row of arched roofing is in the richest Saracenic style of intersecting cinque-foil arches; the fluted pillars are of one piece, beautifully wrought, of inlaid arabesque patterns. The three central arches, corresponding in position beneath the exterior domes, are lofty and imposing. The flooring is of white marble, with inlaid Moorish arches in black marble, within each of which one person can kneel at prayers; of these there are six hundred—all with the top of the arch facing the west, India being East of Mecca. At each end of the mosque are large stalls for the women, separated by delicately-wrought open tracery in white marble, which, at a little distance, looks like lacework. Many people who have first visited the Taj, before seeing this exquisite work of art—durable as the pyramids in strength, yet with the finish of jewellers' work—accord the palm of merit to the mosque, influenced no doubt in the comparison, by its extreme chasteness and beauty, coupled with the enduring character of the work, and its dedication to the service of the true God. A traveller has justly remarked that it is a sanctuary so pure and stainless, revealing so exalted a spirit of worship, that I felt humbled as a Christian to think that our noble religion has never inspired its architects to surpass this temple to God and Mahomed.

Let us now cross the interior of the fort and view the modern arsenal, which was the *diwan*, or judgment-seat, of Acbar. The roof rests on three rows of pillars connected with Saracenic arches, and there is no doubt of its having been originally built open at the western side and the ends, but when converted to its present uses the outer arches were walled up so as to form a spacious hall divided into three aisles, with the throne room recessed back in the centre. Lord Ellenborough here deposited the celebrated sandalwood gates of Somnauth, better known in Western India as Dwarka, or Jigat, situated on the Okamundel coast in the Guickwar's dominions. These gates were carried off by Sultan Mahmood of Ghuznee, of whom it is related that, after having

taken the city, he commenced demolishing the idols, when the Brahmins offered him immense sums if he would spare the chief deity of the great temple. Mahmood was only tempted for a moment when raising his iron mace, he exclaimed, "Truth is better than gold," and smiting the idol, cleft it in twain, when out poured from its interior a store of gold and diamonds far exceeding the promised redemption.

The gates were taken off to Ghuznee, where they formed a trophy of Mahmood's distant raid for nearly three centuries. They were removed to Agra by Lord Ellenborough at the close of his Affghan campaign; and I could never understand why it became the foolish fashion to cast ridicule on the Governor-General for removing a cherished war trophy from a nation who had merited chastisement at our hands. Would Englishmen not consider it a national humiliation if any of our war trophies were taken away by a retiring conqueror? It is of little moment that they are worn, and intrinsically worthless, the same may be said of our tattered rags of colors hanging in Chelsea Hospital. It is the sentiment of glory associated with the object which gives trophies their special value. The gates are in a most dilapidated state, nor do I think that even in their palmy days they were anything to be proud of, especially in their carpentry and fitting. In the centre of the hall is Acbar's throne from whence he pronounced judgment after cases had been argued in his presence. It is a pavilion of white marble, inlaid with jaspar and cornelian in the form of flowers, ornamented scrolls and sentences from the Koran. Behind the arsenal and facing the Jumna, is the palace of Acbar in nearly a perfect state of preservation. Like most Eastern palaces, this is a perfect labyrinth of separate masses of building and detached pavilions, each of which is complete in itself, and replete with beauty of proportion, and inlaid work of jaspar and other precious stones; the inlaid flowers here contain all the infinite change of shade, from the outer leaves, to the interior petal of each flower, which must have taken much labour and required special study to effect; of these their name is legion. One is struck with astonishment at the pains and cost bestowed on every part of these beautiful white marble palaces. Some of the outer courts are so fairy-like in their structure of Moorish arches, with tapering abutments of open filigree work, resting on double shafts, as to suggest to the visitor that they are truly a fit residence for a fairy queen. No part of the palace is incomplete; a cannon shot here and there has, in flying wantonness, pierced the delicate tracery panels, the beauty of which are so exquisite that to see them in an injured state is to feel as if a wrong had been done to our personal selves. I may

relate a piece of Gothic barbarism, I was, in intent, guilty of; but at another place I saw that some one, more guilty, had broken a panel of carved stone open filigree work. I wished to secure a piece for our Museum, so threw a stone of considerable weight at the broken edge of it, but so strong and tough was the red sandstone of which it was made, that I did no damage, and although there was no one near me, it appeared such a desecration of art that I could not strike another blow.

By descending some steps we come to the "bath of mirrors," and although the baths be dry, the roof is the most unique thing imaginable. It is composed of Saracenic intersecting arches, supported on white marble pillars; but the whole roof is decorated with various patterns in small green-tinted mirrors, embedded in cement, and formed into curiously combined figures, that only the dreamy imagination of an Eastern mind could conceive; by torchlight the beauty of the flashing reflections must be seen to be appreciated, descriptions would fail to give even a faint idea of the coruscations of emerald light caused by the waving torch. A recent traveller says the substructions of the palace are of red sandstone, but nearly all the corridors, chambers, and pavilions are of white marble, wrought with the most exquisite elaboration of ornament. The pavilions overhanging the river are inlaid, within and without, in the rich style of Florentine Mosaic. They are precious caskets of marble, glittering all over with jaspar, agate, cornelian, bloodstone, and lapis-lazulli; and topped with golden tipped domes. Balustrades of marble, wrought in open patterns of such rich design that they resemble fringes of lace when seen from below, extend along the edge of the battlements. The Jumna washes the walls ninety feet below, and from the balconies attached to the *zenana*, or women's apartments, there are beautiful views of gardens and palm groves on the opposite bank, with that wonder of India, the Taj, shining like a palace of ivory and crystal about a mile down the stream. The most curious part of the palace is the Shish-Mahal (Palace of Glass), which is an oriental bath, the chambers and passages whereof are adorned with thousands of small mirrors, disposed in the most intricate designs. The water falls in a broad sheet into a marble pool over brilliant lamps, and the fountains are so constructed as to be lighted from within. Mimic cascades tumble from the walls over slabs of veined marble into basins so curiously carved that the motion of the water produces the appearance of fish. This bath must once have realized all the fabled splendours of Arabian story. The chambers of the sultanas and the open courts connecting them are filled with fountains.

As we are now tired, we will retire to our inn, generally called "Beaumont's Hotel," which has an attentive landlord, a well kept table, and from where daks can be laid to any of the surrounding lions of Agra. Hotel charges are pretty near the same all over Bengal and the N. W. Provinces, as at Bombay; except that at Agra good brandy was Rs.4 per bottle; and when I was there in October, cheroots were at Rs.6 per 100. These little prosy, but essential details, are, after the beauties of Acbar's palace, like small beer after champagne.

TOM CRINGLE.

January 8th, 1864.

AGRA *(Continued.)*

No. VIII.

Before leaving the Fort, I must notice a black marble slab—the throne of Acbar, where he sat on great occasions; it is placed on the edge of the battlements overlooking the Jumna from a terrace on the north side of the Emperor's pavilion, in front of the Divan-i-Khas. It is said to be eleven feet long, seven feet wide, and two feet deep. On its edges are carved the following:—

"This was the throne of such a mighty king, that his sword cut the heads of his enemies in two whenever it was drawn from its jewelled scabbard. It was the proof stone of all the kings upon the earth; and as this stone proves gold and silver, so did the sun and moon prove its temper. This kind of stone comes only from heaven."

Acbar's soothsayer would appear to have read the stars to little purpose, and he must look at his master with "the face of blackness" if they are allowed to glance down from their present abode and see the desolation of Acbar's former pomp and greatness, compared with the time when the following lines were composed:—

"Whilst the heavens are the throne of the sun, so long will the throne of Selim remain. Always like the light of the goodness of God; so will this throne of Huzrut Sultan Selim Acbar Shah, when Acbar, the heir to the crown and signet, sits on this throne."

There is also a verse which states that it was made in the year 1010 of the Hijree. This famous throne is cracked right through; the natives say that when the Mahrattas took Agra and the Rajah of Bhurtpore seated himself thereon, it not only cracked

from side to side, but blood spouted from it in two places. Lord Ellenborough caused it to shed blood a second time. I sat on it, but no miracle followed! If Lord Dalhousie had sat on it it would probably have bled itself three feet shorter for his annexing peccadilloes. So far from the throne being eleven feet long, it is not more than 8 feet by 5 feet. Opposite to it is a smaller one of white marble, whereon tradition hath it that Acbar's jester used to sit and mimic his royal master. Alas, for the greatness of kings, the beautiful marble pavilion, inlaid with precious stones and gold, is now a receptacle for commissariat gunny-bags! I am the more surprised at this desecration, as the Government are now engaged in arresting the hand of Time by making little repairs at many of the noble buildings in and around Agra, and also at Delhi.

The palace garden of 300 years since is still in existence, with its cool fountains, blooming with roses and perfumed by jasmine. Even Acbar's follies partook of a largeness of conception quite remarkable; for within the palace court is a pachisi-board in squares of black and white marble something like backgammon, but in lieu of inanimate pieces, they used the master-pieces of nature, with fair skins, rosy cheeks, and laughing soft black eyes; they were dressed in four different coloured silks, placed on the different squares, then moved about as the game progressed, and taken off as prizes to the winner! This must have been a favorite pastime, for there is a similar paved floor at the king's country palace at Futteypore Sikree, 22 miles from Agra.

There are underground passages beneath the fort, said to be of great length, even to reach to the Taj, three quarters of a mile distant. These would not be difficult to make, as the alluvial soil of the Jumna would readily stand to be tunnelled and lined with bricks.

There is also in the very heart of the fort what appears to have been a Hindoo temple or palace. It is built of red sandstone, and many parts of it, especially the friezes, and massive pillars supporting the corridors, are elaborately carved. The frieze facing the river shows an eastern procession of elephants, camels, warriors on horse-back, foot soldiers, &c. &c. But the building looks gloomy after viewing the white marble, fairy-looking, palaces of Acbar.

As the events which gave rise to the erection of the celebrated and world-renowned Taj claim a separate chapter, we will bid the reader good night.

TOM CRINGLE.

January 14th, 1864.

AGRA—THE TAJ.

No. IX.

As many people on this side of India,—like myself before I went to Agra,—know no more of the history of Mumtaz Mahal, in whose memory the Taj at Agra was built, than they do of that building itself, I will give some extracts from a small hand-book translated from the Persian* :—

"In the name of God the most merciful and kind.

"Shah Jehan, Emperor, Conqueror of Worlds, Protector of the Poor, Taker by the hand of the Distressed, Most Learned and Illustrious, had four sons by his Empress, Mumtaz. The first born was Dara Shako, whom the Emperor appointed as his successor, and who lived with him; he was Governor of Hindustan.

"The second was Shah Shoojah (like Joseph), and very learned; he was Governor of Bengal; he collected all the wise and clever men around him, and in every way was obedient to his father.

> Happy the man who hath a son like this;
> Who by obedience added to his parent's bliss.

"The third son was Aurungzeb Alumgeer; he governed the Deccan with great wisdom.

"The fourth was Mahomed Murad Buksh; he governed Guzerat, Tatta, and Bukkur on the Indus, with great wisdom, and never did anything without the advice of his father.

"The Emperor had also four daughters, accomplished, beautiful, and obedient. The first, Unjeman Arra Begum; the second, Gatee Arra Begum; the third, Jehan Arra Begum; and the fourth, Dhahur Arra Begum, who cried before he came into the world, and whose birth occasioned the death of the Empress. On the day that the child cried, the mind of the Empress became oppressed, and all the servants and children, who heard the noise, were sore afraid, and would remember it all the days of their lives; they said such a marvel had never been heard before that it belonged to the world of wonders, and they cried:—'Oh great God, let the consequence of this be nought but good; the Emperor should be informed of it, that he may do whatsoever in his wisdom seemeth to him best.' It is said that the Empress suffered greatly when this daughter was born, and that by orders of the Em-

* Many people fall into the error of thinking that NOOR JEHAN was buried in the Taj; this is an error as she was buried in the Punjaub.

peror many clever medical men and experienced midwives, were assembled, and that they all acted according to his advice. The wives of the Ministers prayed for the recovery of the Empress, and some wished to give her medicine.

"Without the will of God not a leaf stirs in the grove. They tried every remedy—without success; no alleviation to her pains, but they rather increased, though every prayer was said. On one side all the priests read prayers, and used charms; on the other, the nurse rubbed the hands and feet of the poor Empress, and the child continued to cry much before it came into the world. On hearing this the Empress gave up all hopes of life, and called the Emperor to her, and weeping, said:—'Oh King, to-day such misfortunes have shown their faces that my mind is troubled and oppressed, and I am very restless; I know not how this will end.' The Emperor on hearing these words was grieved and astonished, and placing his finger on his lips, tried to think of something to solace and comfort the Begum; she ordered all her gems and jewels to be brought, and gave them to the Emperor, and begged him to be kind to his children; sometimes the two laughed, and sometimes cried, as they talked about the thoughts of death. The Empress said, 'when a child cries before its birth, the mother always dies, therefore I must prepare to take leave of this world; pardon all my faults, and any angry words I may have said; after this I am ready to be a traveller (*i. e.* to die).' The Emperor hearing these her last fond words, from the great love he bore her wept so much, it was like the stars falling from heaven, or the rain upon the earth.

Were I to paint it, the whole world would weep;
Suffice to say, the Emperor's grief was deep.

At last the Empress after crying much said, 'Oh King, I have lived with you through joy and through affliction. God has made you a great Emperor, and given you worlds to rule; there is a last wish of my heart, now I am about to leave you, and two pieces of advice I would fain have you follow.' The Emperor assured her that whatever they might be, he would obey them. The Queen then said:—'The High God has given you four sons and three daughters to perpetuate your name; do not marry again, so that quarrels and estrangements may not arise among them. The second thing is, build over me such a beautiful tomb as the world never saw.' Shah Jehan promised both things. The Begum gave birth to the child, but was greatly agitated in her mind, the nurses prayed for her life, saying, 'Oh God, let us die, but save thou the life of the Begum;' and everything was done which was usual at a birth.

When death arrives the doctors are no use;
All their reward is often unrestrained abuse.

Soon after this the Empress began to shiver and all her limbs turned cold, and such lamentations arose in the palace as if the Day of Judg-

ment were at hand. The Emperor did nothing but weep and beat his breast, saying, in the language of the poet Sadi,—

> Money abides not in the palm of those who careless live,
> Nor patience in the lover's heart, nor water in a sieve.

At last the Empress left this world, and went to the next, living with the peris in heaven; her mortal remains were interred at first in a garden near the present site of the Taj, and when her tomb was prepared for her, they were afterwards removed with great ceremony to the vault underneath the Taj. Plans were brought of every kind and description of mausoleum in the world, and laid before the Emperor, who, after much thought and study, selected that presented to him by one Isa Mahomed Effendi, a celebrated architect, who was sent by His Highness the Sooltan of Room (Turkey). A model of it was first made in wood; and during a space of 17 years precious stones and marble were collected.

"The date of the death of the Begum is given in these verses :—

> When Mumtaz Mahal left this world,
> The houris opened the gates of Heaven for her,
> And the angels gave this last verse for the date,
> The resting place of Mumtaz Mahal is in Heaven.

This last verse being read, each letter in the Persian standing for a figure, gives 1040 of the Hijree, which, allowing for the Mahomedan method of counting, would be 1630 A.D.

"The Emperor Shah Jehan Shahboodeen Mahomed himself wrote these verses in praise of his beloved wife, and of the tomb erected over her:—

> What a beautiful and lovely place for a tomb,
> Like those in the time of Kais;*
> Truly a place for lovers to sleep;
> The ground made of sweet amber
> As in the seventh heaven.
> An edifice like those in the garden of paradise;
> The sweet fragrance spreads all around.
> The houris sweep its courts clean
> With their drooping eye-lashes;
> Its walls and doors set with jewels,
> Its air pure, and water sweet.
> The architect of this beautiful place
> Brought the water from the "Chushma-i-Faiz."†
> The rain from the clouds of mercy
> Falls continually on its lofty dome.
> Should any one enter its holy precincts,
> And ask a boon of the High God,
> It will undoubtedly be granted him.
> Every one living here is celebrated
> Throughout the world for hospitality.
> One might imagine the soft breezes
> Left this place without receiving anything;

* Mujnoo and Leila; Lovers celebrated in Oriental poetry.

† Celebrated fountain situated in one of the Mahomedan heavens.

There are plenty of the plants called the flower of generosity.
And they are filled with their sweet perfume.
The flowers laugh, but hide their heads;
The clouds rain, but it is the rain of compassion.
Should any sinner seek protection at its gates,
His sins are forgiven, like those of the dwellers in heaven.
The buds of the trees always wish to laugh like children,
The breezes are so gentle, they do not annoy the flowers,
They are "behind the curtain;" for is it not the place
Of a spotless beauty? and they hide in a corner,
While the blushing buds expand.
Any one seeking protection here will find it,
For the place is consecrated to the High God.
If any wicked person should come here,
The pages of the book, kept by
The Recording Angel, will be clean.
If the sun and moon see this place
Their eyes will be full of the tears of compassion.
In this place, covered by the blue vault of heaven,
The sun itself is a receiver of benefits,
For as soon as the sun retires
The moon attends to receive the bounty.
Life is pleasant in this place, for it is full
Of entertainment for the stranger and the poor.
Before this, enternity did not ever exist,
Death himself has removed his presence from here.
The builder could not have been of this earth,
For it is evident the design was furnished him by heaven;
Its foundations are as firm as those of the world,
And like the creed of the faithful.
I know not how all the colors came here,
But they must have come for protection
When the builder made it; it was intended
For everlasting peace, and a place of security.
When the hand of eternity laid its foundations,
The winter time of year fled afar to the jungles."

The following is written on the sides of the Begum's tomb:—

"The splendid tomb of Unjeman Bunnoo Begum, whose title was Mumtaz Mahal, was made in 1040 of the Hijree." This is written on the side of the left hand tomb, that of Shah Jehan Emperor:—"The magnificent tomb of the King, inhabitant of the two heavens, Ridwan and Khool; the most sublime sitter on the throne in illecyn (the starry heaven), dweller in firdos (paradise), Shah Jehan Badsha Gazee, peace to his remains, heaven is for him; his death took place the 26th day of Rujub in the year 1076 of the Hijree, (1665 A.D.) From this transitory world

Angels have borne him to Heaven

"The names of some of the workmen who came from divers countries to assist in the building of the Taj:—

'The Head Master was Isa Mahomed, his salary was Rupees 1,000 a month.

'The Illuminator, Amarnud Khan, inhabitant of Shiraz, also at Rupees 1,000 a month.

'The Master Mason, Mahomed Hunif, from Bagdad, also at Rupees 1,000 a month.

"The golden cupola became broken by a violent storm before it was

finished, and the son of Isa Mahomed Shareef undertook its repair: he received Rupees 500 per month. A great many other workmen also were employed, some from Turkey, Persia, Delhi, Cuttack and the Punjab, and received salaries varying from 100 to 500 Rupees a month.

"NAMES, WEIGHT, AND VALUE OF SOME OF THE STONES.

"The white marble came from Jeypore in Rajpootana.

"The yellow, from the banks of the Nerbudda; a square yard of this cost Rupees 40.

"The black marble came from a place called Charkoh (four hills); a yard square of this cost Rupees 90.

"Crystal from China; one square yard cost Rupees 570.

"Jasper from the Punjab. Cornelian from Bagdad. Turquoises from Thibet. Agate from Yeman. Lapislazuli from Ceylon; the square yard cost 1,156 Rupees. Coral from Arabia and the Red Sea.

"Garnets from Bundelkund. Diamonds from Punnah in Bundelkund: it is, however, very doubtful if any of these were used, although as many of the precious stones have been picked out by the Játs and the Europeans when they severally took Agra; there may have been a few in some few of the flowers.

"Rock spar from the Nerbudda. The philosopher's stone from Marcheon. The load-stone from Gwalior. The onyx from Persia. The chalcedony from Villait. Amethysts from Persia. Sapphires from Lunka, and the red sand-stone, of which 1,14,000 cart loads were used, came from Futtehpore-Sikree: many other stones were also used in the inlaying the flowers, which have no name in our language.

"Most of these were received in lieu of tribute from different nations under the Emperor's rule; or were made presents, voluntarily or otherwise, by the different Rajahs and Nawabs."

THE TAJ.

This world-renowned Tomb of Shah Jehan and his Empress Mumtaz Mahal, is on the right bank of the river Jumna, whose waters wash the east wall of the terrace on which it is built. It is about a mile from the military cantonments, and two miles from the town of Agra. As in a distant view of the City of London from any of the hills around, St. Paul's, by its altitude and imposing dome, always commands attention; so also does a distant view of Agra bring the dazzling white marble dome of the Taj before the eye. On a very clear evening it is seen from the lofty portal of Futtypore-Sikree, 22 miles distant.

I think the most imposing view-point of the Taj is through a long vista of cypresses seen from the roadway on the outside

of the west portal, the double archways of which are grand and imposing, being about 80 feet high; with its summit decorated with graceful cupolas on slender stone pillars, and its side panels in white marble on red sandstone, with illuminations from the Koran, inlaid in black marble, in Persian. I was much struck with the fitness of the Persian for illuminative purposes; from the firm style, yet bold graceful curves the characters take, I do not think any language can approach it in beauty in this respect. Both the inner and outer faces of these portals are decorated, not only by verses from the Koran, but other inlaid work is employed to enhance the beauty and grandeur of these noble entrance gates, of which there are three, on the north, south, and west—the east is washed by the Jumna. These are built of the blood-red sandstone already described: and from the portals run the walls which enclose the garden of about 20 acres. So much labour, money, and architectural skill has been expended on the portals, that, from their magnificence alone, they enhance the beauty of the Taj—not only by contrast in colour, but by the importance they confer on it in being placed in a position, and for a purpose, subservient to it. If no other building were to be seen than one of these portals, thousands of travellers would go to see them, and travel thousands of miles to do so.

The way leading to the Taj from the west portal is between a tall row of cypresses on each side of a paved pathway 10 feet wide, with a continuous trough 12 feet broad as a basin for the fountains to play into. These fountains are most unskilfully planned. They are common unmeaning jet pipes, like the nozzle of bellows, arranged down the centre of the oblong trough already alluded to, and when set playing they merely throw a plain, straight, feeble jet, whereas if they had been disposed on each side, close to the edge of the footpath, and the jets had been given a slight inclination to the opposite sides, they would have shown a magnificent arch of water throughout their whole length of 100 yards—a splendid liquid tunnel, in the centre floor of which might have been placed at night, rows of lamps which would have given the scene quite a fairy appearance. Application must be made to the Executive Engineer of the District to see them playing. (I would suggest that the public be informed of the time *when*, through the press.) The garden is not well laid out, being too stiff and formal; it wants curved paths, clumps of trees, masses of shrubbery, basins with waterfowl, and the flowers massed together more, not in little driblets as they are now.

Having arrived at the end of the vista already described, let us now turn our attention to the Taj. I must here beg the reader

to bear in mind that I am no more fitted to describe this CROWNING EDIFICE OF THE WORLD than I should be able to preach a sermon for a bishop. And I only make the attempt, more with a view of imbuing those who have not seen it with an abiding desire to do so as early as possible, than with any assurance of my own capacity to do justice to so noble a theme.

The Taj stands on a white marble terrace about 30 feet above the level of the gardens which surround it, the breadth of the square is 100 yards, at the angles of which are four beautiful white marble minarets, each of which are 225 feet high, with bases 20 feet in diameter; they are ascended by an interior staircase, where, at elevations of about 40 feet, are look-out galleries. I was more charmed with the minarets than with the Taj itself. The former commanded my admiration the moment I saw them for their marvellous, chaste, simple beauty, and satisfying proportions; one may look at them for a year and never be able to say their form could be improved one jot or tittle. They are an embodied perfection, graceful as the feathery bamboo, and durable as the pyramids.

The Taj itself is a square with the angles truncated, and each side or face (like all Acbar's buildings) is precisely similar. The Oriental dome swells out boldly from its base into nearly two-thirds of a sphere, and then tapers to the top into a crescent tipped spire which crowns the edifice; there are four smaller domes at the angles. On each face of the building there is a grand entrance, (only that on the west is used), the arches of which are magnificent for grandeur of proportion, lavish art, and inlaid beauty. No words can convey an idea of the exquisite harmony of the different parts, and the grand and glorious effect of the whole structure. The marble is a beautiful white; little inferior to Carrara. Every part is inlaid (I am yet writing of the outside only) with marbles of different colours, mostly of a pale brown and violet colour; and great as are the dimensions of the Taj, it is as laboriously finished as a Chinese casket. Around the arches of the portal, cornice, domes, and walls of the passages are inlaid verses of the Koran in Persian, and it is said that the whole words of the Koran are thus inlaid over the building. An American traveller thus describes the Taj:—

"I ascended to the base of the building—a gleaming marble platform, almost on a level with the tops of the trees in the garden. Before entering the central hall, I descended to the vault where the beautiful Mumtaz Mahal is buried—a sloping passage conducting to this spacious chamber, whose walls and floor have been so polished by the hands and feet of thousands, that you must walk carefully to avoid

sliding down. There is no light but what enters at the door, and this falls directly upon the tomb of the QUEEN in the centre; Shah Jehan whose ashes are covered by a simpler cenotaph, raised somewhat above hers, sleeps by her side. The vault was filled with the odours of rose, jasmine, and sandal-wood, the precious attars of which are sprinkled upon the tomb. Wreaths of beautiful flowers lay upon it, or withered around its base. These were the true tombs, the monuments for display being placed in the grand hall above, which is a lofty rotunda lighted both from above and below by screens of marble and jasper, and ornamented with a wainscoting of sculptured tablets representing flowers. The tombs are sarcophagi of the purest marble, exquisitely inlaid with blood-stone, agate, cornelian, lapis-lazuli, and other precious stones, and surrounded with an octagonal screen six feet high, in the open tracery of which lilies, irises, and other flowers, are interwrought with the most intricate ornamental designs. It is of marble, covered with precious stones. From the resemblance of this screen and the workmanship of the tomb to Florentine Mosaic, it has been supposed that it was executed by an Italian architect; and I have even heard it stated that the Taj was designed by an Italian artist. One look at the Taj ought to assure any intelligent man that this is false—nay, impossible—from the very nature of the thing. The Taj is the purest Saracenic in form, proportions, and ornamental design. If that were not sufficient, we have still the name of the Moslem architect sculptured upon the building.

"I consider it extremely doubtful whether any Italian had anything to do with the work, though it is barely possible he may have been employed upon the screen around the tombs. In the weekly account of the expenditure for building the Taj, there is a certain sum mentioned as paid to 'the foreign stone-cutter,' who may either have been Italian, Turkish, or Persian. As for the flowers represented in basrelief on the marble panels, it has been said that they cannot be found in India. Now these flowers, as near as they can be identified, are the tulip, the iris (both natives of Persia), and the lotus. But I noticed a curious feature in the sculpture, which makes it clear that the artist was a native. *The flowers lack perspective*, which would never have been the fault of an Italian artist of Shah Jehan's time—about the middle of the seventeenth century. Bishop Heber has declared that he recognized Italian art in the ornaments of the Taj, but he declared also that its minarets have no beauty, that the fort of Agra is built of granite, and many other glaring errors, both of taste and observation, which I have no time to point out. The dome of the Taj contains an echo more sweet, pure, and prolonged than that in the Baptistry of Pisa, which is the finest in Europe. A single musical note, uttered by the voice, floats and soars overhead in a long, delicious undulation, fading away so slowly that you hear it after it is silent—as you see, or seem to see, a lark you have been watching, after it is swallowed up in the blue vault of heaven. I pictured to myself the effect of an Arabic or Persian lament for the lovely Mumtaz Mahal sung over her tomb. The responses that would come

from above, in the pauses of the song, must resemble the harmonies of angels in Paradise. The hall, notwithstanding the precious materials of which it is built, and the elaborate finish of its ornaments, has a grave and solemn effect, infusing a peaceful serenity of mind, such as we feel when contemplating a happy death. Stern, imaginative persons have been known to burst suddenly into tears on entering it; and whoever can behold the Taj without feeling a thrill that sends the moisture to his eye, has no sense of beauty in his soul.

"The Taj truly is, as I have already said, a poem. It is not only a pure architectural type, but also a creation which satisfies the imagination, because its characteristic is beauty. Did you ever build a castle in the air? Here is one brought down to earth, and fixed for the wonder of ages; yet so light it seems, so airy, and when seen from a distance, so like a fabric of mist and sunbeams, with its great dome soaring up a silvery bubble, about to burst in the sun, that, even after you have touched it, and climbed to its summit, you almost doubt its reality. The four minarets which surround it are perfect—no other epithet will describe them. You cannot conceive of their proportions being changed in any way so little as half an inch, without damage to the general effect. On the one side of the Taj is a mosque with three domes of red sandstone, covered with mosaic of white marble. On the opposite side there is a building precisely similar, but of no use whatever except as a balance to the mosque, lest the perfect symmetry of the whole design should be spoilt. This building is called the *jawab*, or 'answer.' Nothing can better illustrate the feeling for proportion which prevailed in those days—and proportion is art. In comparing these masterpieces of architecture with Moorish remains in Spain, which resemble them most nearly, I have been struck with the singular fact, that while at the central seats of the Moslem empire, art reached but a comparative degree of development here and there; on the opposite and most distant frontiers, it attained a rapid splendid culmination.

"The capitals of the Caliphs and the Sultans—Bagdad, Cairo, Damascus, and Constantinople—stand far below Agra and Delhi, Granada, and Seville, in point of architecture, notwithstanding the latter cities have but few and scattered remains. It is not improbable that the Moorish architects, after the fall of Granada, gradually made their way to the eastward, and that their art was thus brought to India, or at least that they modified and improved the art then existing. The conquest of India by Baber (grandson of Tamerlane, and grandfather of Akbar) is almost coeval with the expulsion of the Moors from Granada.

"But the sun grows hot; it is nearly noon. We had spent three hours in and around the Taj, and we must leave it. Nothing that is beautiful can be given up without a pang; but if a man would travel, he must endure many such partings. I must add, however, before we go, that on the opposite side of the Jumna there is an immense foundation-terrace, whereon it is said Shah Jehan intended to erect a tomb for

himself, of equal magnificence, but the rebellion of his sons and his own death prevented it. What the gods permitted to Love they forbade to Vanity. A Shekh who takes care of the Taj, told me that had the Emperor carried out his design, the tombs were to have been joined by a bridge with a silver railing on each side. He told me that the Taj, with its gateways, mosques, and other buildings attached, had cost seven crores of rupees" (seven millions sterling).

The foundations and terrace of the Taj must have cost nearly, if not quite as much, as the superstructure, for its enormous weight would necessitate a deep excavation 400 feet square, far below the bed of the Jumna, and this would have to be filled with concrete brought up to the surface on which to erect the building; for to risk the stability of an edifice so costly would have been false economy. It is much to be regretted that a detailed account of the progress of the building has not been handed down to us. We learn, however, that the labour was all forced; twenty thousand men were employed for seventeen years in the construction of this noble mausoleum; corn was given to them, and even this was filched by overseers; little or no wages were given; and the mortality was frightful, not only to the workers in this Egyptian bondage, but the surrounding peasantry were also cut off by high grain prices producing starvation, and by diseases which always assail large bodies of Asiatics when drawn together. The poet described them to have cried out in their bitter wailing,—

> Have mercy, God, on our distress,
> For we die, too, with the princess.

I no longer can think of Acbar or his line as good kings to their subjects. It fills the mind with profound sorrow to think that the money lavished on this and other buildings, yet to be told of, was only to serve an inordinate vanity. Everything was built for selfish purposes. Forts to keep his subjects in order, and to shelter royalty from any outburst of despair from their wretchedness; palaces built with a gorgeousness and splendour scarcely to be believed, except they be seen and peopled by the imagination, with the attendant costly pomp and luxury which "doth hedge a king;" mausoleums, more costly than either forts or palaces, to show to a wondering world that here lieth the spendthrifts of the universe! If we look around these splendid piles, we only see the usual squalor of Indian towns and villages; nothing has been spent on the *goldwinner;* we look in vain for colleges, roofed-in bazars, roads, bridges, hospitals; even the house he built and dedicated to God (the Pearl Mosque) appears to have been erected to serve himself and

Court, as it is within the fort, close to his palaces; and a suspicious Eastern mind would never have admitted the public throng to worship under the same roof.

It is worth while to reflect whether, had he lavished his money in founding schools to foster art and science, and in lieu of sending all over the civilized world to gather architects to minister to a selfish ambition, he had imported men of science to teach his subjects the Arts of Peace and War, would a people from an obscure island, that in all probability he had scarcely heard of, be now the rulers of his kingdom, and the guardians of the costly forts, palaces, and tombs his pride has raised?

The visitor to Agra should abstain from seeing the Motee Musjid and Taj until he has viewed everything of note in its vicinity, for to visit the many other fine buildings afterwards, is to bring a cloyed taste that fails to accord a due meed of praise where praise is really due. Thus, after viewing the Taj, one feels indifferent on visiting the splendid tomb of Itmaddowla, situate in the midst of a beautiful garden, on the left bank of the Jumna, opposite the city. It is built of white marble, minutely and beautifully sculptured and inlaid; it stands on a raised platform, from the corners of which rise marble minarets like the Taj, only on a lesser scale, but its design, richness of decoration, and purity of taste, show that those who built the Taj must have built this also.

TOM CRINGLE.

January 18*th*, 1864.

THE TOMB OF ACBAR.

No. X.

This tomb is seven miles from Agra, in a south-west direction; the road leading to it is studded on each side with Mussulman tombs, built with more or less taste, but many with considerable cost.

I went to visit this celebrated tomb with a very pleasant party, and we determined to combine the sight seeing with a picnic on a fitting scale, and so spend the day amid the shady groves of this lovely spot. So starting at 4 o'clock from Agra, we arrived by daybreak on a fine cool morning, the air bracing, and the

atmosphere clear and pellucid. On arriving at the gigantic portal leading into the gardens, we were struck with its beautiful proportions, and the altitude of its arch, which could not be less than 80 feet high and 50 feet through. The entrance portals leading to the celebrated mausoleums built by Acbar, are so noble, lofty, and of such just proportions, that, to the casual observer, they appear repeated copies of each other: but the one we are now at differs in having beautiful minarets at the four angles. One-third from the summit of these have been battered down—some say by Lord Lake when he visited Agra in 1803, which of course is untrue, as what Englishman could be such a tasteless Goth so as to deface such beautiful works of art? Still less can I conceive any civilized general coming here to a king's tomb to deface it. There is a like falsehood reported of Lord Bentinck, when Governor General, who, it is said, proposed to *pull down the Taj and sell the materials!* Rumour is nearer the mark when she lays this disgraceful act on the Jâts, who sacked Agra and then turned their guns in mere wantonness on these minarets; and even in this case, it would appear to be the act of an unbridled Eastern soldiery, who had not the temerity to fire at the lofty tomb of Acbar, a much better mark. Whoever defaced these beautiful minarets did it with cannon shot, the marks of which are only too plainly visible. If my readers will pay a visit to the Bombay museum they will be able to estimate the disfigurement from a very well executed large drawing of the entrance portal, and the tomb, done in the Delhi style, and which illustrates them with even minute fidelity. I think the Government should restore these defaced minarets. They are repairing parts of the portal and also of the mausoleum.

Acbar named his tomb Secundra after Alexander, but the MACEDONIAN hero never reached so far east as Agra; his famous battle with PORUS was fought on the banks of the Jhelum (Hydaspes) hundreds of miles north of this famous tomb, which stands in the middle of a garden even larger than that in which the Taj is situated, and which abounds with tall forest trees giving it a character in keeping with the grandeur of the edifice it encloses. There are immense covered tanks and fountains intersecting the centre approach, which, from the portal to the tomb, is four hundred feet long, about fifty feet wide, and is paved with white marble. The materials of which the mausoleum is built have a very pleasing effect. The raised platform surrounding it is of white marble and is one hundred feet wide and three hundred feet long on each face of the square; the basement storey consists of open corridors built of

the same chaste material, and the two arches on each side of the grand entrance-arch are embellished with panels of the open tracery work, which is such a beautiful and costly characteristic of the building under description.

These verses are written around the doorway leading to the underground tomb of king Acbar:—

According to the orders of the King of Kings, Zuljelal.
Whose kingdom remains for ever,
The earth was populated, so as to be matter of astonishment,
To the clever and the learned;
Before the days of kindness in the world he was created,
The protection of God was bestowed on him,
When the protection was hidden (i. e. when the Emperor died);
It was then bestowed on another;
This is the way in this world.
He did not take away his treasure with him,
But left it to benefit others after him.
Events are every moment taking place,
And never remain the same for any one.
Exalted unto the heavens, his palace was in Urash,
(The ninth heaven, where the throne of God is,)
Before his exalted station the mountains
Are in comparison only a heap of straw.
When he sat upon his splendid throne,
He ruled the world by the will of God.
His crown was splendour, his throne was splendour,
He was kind, generous, merciful,
Favored by fortune, and most learned.
He spent the riches of this world,
He gave them to the poor, he took, and he left them;
In the garden of the world he sowed the seed of goodness,
He brought this plant from the garden of Eden;
His life was like the splendour of the sun and moon.
May the memory of it remain for ages,
Like the light of God.

The above verses are inlaid on white marble in Persian characters with black marble; the effect is magnificent.

This splendid mausoleum is of a square pyramidal form, effected by making each of the five storeys, of which it is composed, to recede back from the one below it. This arrangement gives a beautiful terrace to each storey, with ample space to make well-staircases without marring the exterior beauty of the walls of each storey. It is a strange and characteristic fact that, notwithstanding the master mind, and true genius of the boldest type, which designed these noble mausoleums, not one of them has an easy angled staircase—they are all of that style, to ascend which, you have to lift the knees up to the hip at each step.

Another defacing feature, both in this tomb and at the Taj, are the entrance doors in the grandly arched portals, which latter are some 70 feet high, yet the door by which you enter is only some seven feet high and four feet wide, whereas they should be at least fourteen feet high, and five feet broad—but mark, these two

faults are the only ones, I feel convinced, that the severest taste would find room to criticise. The storey at the summit of the mausoleum is of the very purest white marble ; in the middle of the central court, open to the sky, is the show tomb of Acbar; the sides of the central court are open corridors with Moorish arches. The open work at the back of the corridors is in perforated tracery of the strangest yet most beautiful designs imaginable. Some modern attempts at repair are simply ludicrous from utter failure to approach the original. There is a beautiful view from this summit terrace, yet little of Agra is visible ; but the great dome of the Taj looms like a silvery bubble in the clear morning air : and as the sun rises and tips its side with silver, it seems like some creation of a dream which even a whisper may dispel. To stand on the highest point of this grand building and cast the eye below, and view, one by one, the four magnificent portals, at four hundred feet distance from each square of this gigantic mausoleum—itself standing on a terrace base, three hundred feet long by 100 feet broad on each face—is magnificent. Then view the grand white marble causeways, fifty feet broad, converging on the central terrace; nothing can excel it in the world. Here we can view all the solemn grandeur of Westminster Abbey, with the forest quiet of a Druid grove. But this mausoleum has such a pure white chasteness, and such art-lavish and taste as to be unrivalled since Artemisa first built one to the memory of her dead lord Mausolus. The true tomb, under which repose the ashes of Acbar, is in a low vault reached by descending an inclined plane of white marble ; the air in the vault is so close and stifling as to cause the traveller to beat a hasty retreat. Here lies in darkness the fourth descendant in a direct line from Tamerlane, the grandson of Baber the Conquerer, and grandfather of Shah Jehan. The most we can say for any of this so called illustrious line is, that they were more warlike and less cruel than their emasculated descendants. I think we have yet to look in the wide range of Indian history for one really good and virtuous King of our Alfred stamp. To talk about the *splendour* of rule of Baber, Humayoon, Acbar, Jehangher, Shah Jehan, and Aurungzebe, is to tickle the ear and offend the understanding. They were Pathan robbers whose swords cut out kingdoms, the revenues of which were spent in sensual and selfish indûlgence. But I think Acbar was the best of his dynasty. On the summit of the mausoleum, which is open to the sky, there are open corridors on the four sides of the court, which is paved with alternate squares of white and black marble; in the centre stands the tomb, exquisitely sculptured, containing

the ninety-nine names of God in raised Arabic characters, enfolded in elaborate scroll-work, together with the following verses:—

I begin by calling on the name of God
To help me to describe this wonderful place ;
God, the pure, the everlasting, who gives
The throne, crown, and seals to all kings on this earth ;
Who creates things out of empty space,
Whose nature is mercy and justice ;
From whose bounty all the wants of mankind are supplied,
The door of whose durbar stands open
Alike to rich and poor, day and night ;
The Creator of gems from mere earth and water ;
And of that priceless pearl, a pure life.
In the beginning of his bounty he created two worlds,
One he hides from us, the other is open to our view ;
He is the giver of the world as a serai to kings
With the pavilion of royalty and wealth,
That their subjects may live through their justice ;
His garden remains bright with flowers throughout the year ;
If any king lives like this, with justice,
The shadow of God will always be over him ;
And the stranger will look on him as one of his family ;
In the year 962 Hijree (1555 A. D.)
The Emperor Acbar, the shadow of God,
Sat upon his golden throne,
Before which the heavens bowed in respect ;
He adorned the world with equity and justice ;
The hearts of the inhabitants of the world
Were made to rejoice by him ;
The multitude go before him to receive presents ;
No one goes away empty handed ;
Many have received exalted honors from him.
A look from his eyes is, as it were, the key of the earth,
Which becomes there like a pearl,
And is better than life even.
He takes the country of his enemies
With only one attack, when his eye-brows are directed that way ;
His kindness to his people, is like that of God.
On whatever he looks it is made perfect.
If any poor man seeks protection at his court
Like as thought flies from the fish to the moon (i. e. earth to heaven),
He then becomes exalted.
His praises were so spread over the world,
As a secret which will not remain in the breast ;
Thus he adorned the world as God had intended him ;
He reigned with great glory for 52 years.
When Acbar gave inhabitants to the world by his justice,
With which he abounded, like a heart full of a secret.
He was king of even more than the seven kingdoms ;
Now he inhabits eight heavens.
To the wise and the learned this world
Is only as it were a caravanserai ;
Do not seek for kindness in it like the brightness of the nine heavens,
Because there is nothing permanent in it while there is death ;
The world is full of hatred, do not place confidence in it,
Because the kindness of hate is deadly.
Life is like the mirage of the desert,
From it the thirsty soul was never satisfied.
On account of the justice of Acbar
This world became like the highest heaven ;
In his reign this globe was happy,
And the sky and earth were obedient to his will ;
But they broke their word, and from jealousy

Threw kindness away from them;
He passed through this world of ingratitude.
And went to the abodes of the blessed;
Where by the blessing of God may he remain happy for ever,
For the inhabitants of heaven were pleased at his advent.

At each corner of the upper terrace are two marble turrets, the domes of which are covered with gilded and emblazoned tiles inlaid in cement of a very durable character. The screens of filligree of the purest white marble, which are let in as pannelling for the outer walls of the corridors, are of the richest design and execution; no two panels are of the same pattern; and notwithstanding the vast number of them composed of this filligree work, I do not recollect seeing two of the same pattern. In some of these panels are square openings, through which one can creep so as to stand on the outer parapet and enjoy an uninterrupted view of the beautiful landscape spread out before the gaze below, which, ranging over the well-wooded country, takes in parts of the distant city, the spires of three or four Christian churches, and the beautiful Taj, ever thrusting itself on the admiring eye, which is never weary of gazing at it. I have placed in the Bombay museum 12-inch photographs which give beautiful views of Acbar's Mausoleum from the outside, and one shews the Tomb from the interior. Close beside the tomb is a white marble font which I could not discover the use of, except it be for illuminative purposes on solemn festivals. It is beautifully carved, and the guide told us that Lord Ellenborough had a fac-simile made to take to England with him at a cost of eleven hundred rupees—and very cheap too. The court or platform on which the tomb stands is 100 feet square. When perched up at this height a fine view can be had of the slender columns of the cupolas. Delicate as they are, and notwithstanding their great altitude, neither wind, sun, nor rain has had the slightest perceptible effect on these beautiful creations of art, now 300 years old.

After enjoying a very red-letter-day of splendid sight-seeing, lounging under the shade of glorious forest trees, provided as we were with every luxury, including fresh plucked fruit from the garden, with very dear friends, whose loving, and well behaved children, enhanced the pleasure; we left at sundown, and reached Agra in buoyant spirits, and in good humour with all the world. Who would go to humdrum Poonah or Mahableshwur to spend holidays when sights like those, in and about Agra, are open to the traveller?

TOM CRINGLE.

January 23rd, 1864.

FUTTEHPORE-SIKREE.

No. XI.

Lest the title of these "Jottings" be thought to reflect on the dry, salubrious air, and pleasant city of Agra, I have here the pleasure to state that I *found* the health I went in *search* of, and I only retain the heading for the sake of consistency.

One morning, a Mussulman dealer in sketches of the buildings in and around Agra, asked me to buy a picture of the Tomb of Shejk Selim Chisti at Futtehpore-Sikree. I had never before heard of the place, and many old Indians even have confessed the same; yet here is not only a splendid Tomb; but wonderfully beauteous as it undoubtedly is, the surrounding palaces, from their lofty and unique grandeur, and the vast extent of this veritable "City of Palaces" are more wonderful still. The mind is really taken by storm that such a place should exist and be scarcely known except within a few miles radius of Agra. These preliminary remarks are more particularly addressed to publicans (and in this case, *sinners*) in not advising, nay *insisting*, that their guests should, as a matter of duty to their self-respect and taste, visit Secundra and Futtehpore-Sikree. If I now chance to meet a man who has been to Agra, and who has failed to see these places, (which certainly have no parallel in the world) I give him such a friendly scolding that he is fain to hang his head with shame and regret—to raise it again, and with kindled eye, mutter an anathema on the caitiff hotel keeper who did not advise him on such an important subject. As most travellers are sure to put up at Beaumont's Hotel, I trust that henceforth he will see to it, and insist that each, and all of his guests, make the proper pilgrimages to the shrines of beauty in his neighbourhood. No landlord knows better how to provide for the comfortable enjoyment of a picnic in all its many wants, from the lordly sirloin and ice for champagne, to the salt and corkscrew. Mr. Beaumont has an especial eye for the comfort of the gentlemen, whilst Mrs. Beaumont, fresh from the banks of Devon, leaves the ladies nothing to complain of in the way of suggestive comforts. These remarks are purely preliminary, and for an obvious purpose—viz., *Don't miss seeing Secundra, and Futtehpore-Sikree.*

The most pleasant time to visit Futtehpore-Sikree is by moonlight—and the time of the year between the 14th September and the end of February. You must order Dâk to be laid the day pre-

vious; which means horses placed on the road at the various stages, and one in the gharry to drag you the first stage. When our party went there, parts of the road were being raised with earth, and as it was without a metalled surface, the draught was very severe; but oh! the delightful fun of jumping out now and again, with companions brimful of joyous spirits, to push the gharry through the dust, or to coax, or thrash, a jibing horse into progressive motion! Then to look behind and see gentle Cynthia lifting her modest, welcome face, and pouring her soft rays of light on to the glorious dome of the Taj, when it looked like a monster balloon made of gossamer white silk fresh from the loom of Queen Mab! The distance is 22 miles, and the road very good (the incidence related was a chance exception). The traveller should order the comestibles to be packed over night, and the gharry to be ready at 2-30 A. M. when you will get off by 3 o'clock, if no crinoline stays progress. Our crinoline was a queen amongst her subjects, a peerless pearl in beauty, grace, and charity, punctual as Time, patient as Griselda; one who looked after the wants of every one and every thing. With such a start we arrived at leisure within three miles of our destination at daybreak, when the sportsmen of our party shouldered their rifles—some after peacock—others, more ambitious, after deer. Sportsmen should know that there are small jheels, within about four miles of Futtehpore-Sikree, which are thickly tenanted by snipe, teal, and wild duck: peacock are as plentiful as sparrows, and very good eating they are, in the grain country they inhabit.

Having halted at daylight to change horses, we then saw to the west a low range of hills about ten miles long, with intervening dips down to the level of the surrounding valley of the Jumna. At the south-west end of this short range it breaks down quite abruptly, and on the summit-point is seen a lofty portal, which the morning misty air magnifies to double its real altitude. As it is, it looks like the entrance portal to the palace of a Titan king; and when the sun rose and threw his golden rays on its lofty spires and light fairy looking cupolas, it formed a glorious sight, not to be excelled by any temple proud Greece has reared. As we approached the foot of the slope of the hill, we found the whole summit of the range, a mile and a half long, covered with the remains of palaces, mosques, and public buildings, some of them nearly as perfect as when turned out of the skilful builders' hands, whilst others, which had been made for subservient purposes, had fallen, a heap of ruins, with traces of the guilty hand of the spoiler in their recumbent

position. This part of the hill is surrounded with a lofty battlemented wall of strength and beauty, built of the red sandstone so often referred to, and whereof this hill is the prolific quarry. On the S. W. end, where the great portal is built, the wall is distant from the foot of the hill three-quarters of a mile, and thus encloses a level plain large enough to encamp an army—now full of cornfields and gardens. The wall then closes in on the foot of the sides of the hill, and passing through a dip in the range, is carried on to the other, or west side, which, being more precipitous, the wall only encloses what were once large gardens at the foot of the slope. At intervals along the wall are noble entrance-gates, through which the road runs, leading to the summit. There is a road also to the left, within the first entrance gate, which leads to the village of Futtehpore, clustered under the brow of the hill at the S. W. end, but our party went up the side of the hill through the royal entrance-gates, a distance of half a mile. The way on both sides is clothed with ruins, which the visitor has only to people again with the busy throng of Acbar's days, and this Appian way, with rich merchants' shops on each side, evidently built by the architect to accord with the gorgeous palaces around, suggests the picture of these shops brilliantly lighted up, with their tenants on watchful gaze to welcome back the royal truant and his court, who had probably deprived them of rich gains by a prolonged stay amid the fairy palaces of Agra. See the advanced guard, clothed in gorgeous chain armour, and mounted on mettlesome steeds; these are followed by the courtiers of this magnificent king, some on horses and others on elephants; then comes royalty himself, surrounded with all the pomp and circumstance which attends an eastern king.

This lingering on the road will not satisfy the cravings of an empty stomach, which the healthy breeze and keen morning air have created, so we get out of the gharry and walk up the hill, and reach the summit, after passing through a large, paved court, we enter on a terrace having a splendid view of the battlement wall beneath which encloses the plain. On the edge of the terrace is the Travellers' Bungalow—but not the ancient, old barn pattern, so well known all over India, but what was built for, and used as the Cutchery, or Dufterdar's office in Acbar's time, and is now appropriated, and furnished with tables, chairs, couches, matrasses and pillows, for the use of visitors, for which the usual fee of one rupee per day is charged to each person, and grateful the public should be for the accommodation. There is an inner apartment for ladies, or

married couples. It is surrounded on three sides with a noble verandah some 14 feet wide. The building, including the verandahs, is about 80 feet long by 40 feet broad. There is a very good and obliging old Khansamah, who will cook you curry and rice, or make tea, with any bobbachee of the East. The most convenient way, if the party be large, is to bring a cook and two servants, with provisions, wine, spirits, soda water, cigars, candles, knives, forks, goblets for water, all of whom, and which, can ride on or be conveyed in the gharries. The water in the catch tank in front of Selim Chisti's tomb, in the middle of the great quadrangle, is best for drinking. There is a crowd of native boys who will follow sportsmen a whole day, and enjoy the fun, for a few pice in the evening. In the early morning the air is darkened by wild geese and ducks passing from their roosting places to the jheels on the north. Heavy duck guns would reach them as they fly over the terrace, whereon the Travellers' Bungalow is situated. All about the vast maze of palaces is alive with wild pigeons, paroquets, and the cosmopolitan sparrows and crows; there are magnificent large brown owls to be met with at early morn, lurking about the ruins. One of our party shot a large porcupine four feet long, when stretched at length on the ground. He furnished magnificent quills, from 14 inches down to 2 inches.

I dare say the reader is impatient to hear something about the fine buildings, but I thought it best to get rid of the prose wants of every-day-life, before we mount the Pegasus of poetry in describing the buildings. Our party were greatly puzzled with what to provide ourselves on this visit. Therefore I claim thanks and indulgence from the reader in making this known, and thus entering the crooked paths of digression, thickly infested, as they are, with *wait-a-bit* thorns. I have got to pour chatties of cold water over my body, then eat a hearty breakfast, followed by a pipe, and one hour's nap, when I will be at the reader's service.

Let the visitor stand in front of the Dufterdar's, or Record office, where we have just breakfasted, and look around. He is utterly confounded and amazed at the forest of spire tipped cupolas on every side, and a feeling of despair comes over him that he will never be able to see in detail, let alone describe, the picturesque mazes of palaces before him. Every building is in keeping, one with another; art and science having been displayed with a lavish hand on all: some have had more art expended on them than others, but none are plain, or without ornament. In mere distraction of choice, he turns to the left front, and en-

ters a magnificent gateway which conducts him to a quadrangle which is so spacious, so symmetrical, so wonderful in its decorations, as to fill one with amazement. Before us is a paved court 430 feet in length, by 408 feet in breadth, surrounded by a pillared corridor fifty feet high; a triple domed white marble mosque and magnificent gateways are on the east and on the west sides, whilst on the south there towers aloft a Titanic portal 220 feet high, surmounted with a triple domed roof, with light and graceful cupolas on every available spot, whilst the Saracenic gateway, of this splendid creation of eastern genius, is 120 feet high. The whole of the quadrangle is paved with red sandstone except the central portion in front of the tomb; in the centre are tanks and fountains; and over on the north side opposite the noble portal, stands the tomb of Selim Sheik Chisti. This is the wonder of the place. The Mahomedan priests of Delhi spoke with regretful envy of it when I asked them if they had seen it. It is built on a raised platform about four feet above the quadrangle level. Its exterior is about 40 feet square, with a covered verandah supported by double clustered corbels from the wall, on which the wall plates are fixed for carrying, the verandah, the roof of which is thus supported without any pillars to intercept the view of the wondrous flower-like ornaments inwrought in marble filigree around the wall. This splendid and chaste Mausoleum is built of the finest white marble, and is surmounted by a crescent tipped dome of great beauty and chasteness; this latter character is most fully impressed on the visitor. The filigree panels are some 8 feet square, and excite wonder and admiration that such single thin slabs of beautiful marble could be sculptured into such marvellous variety of patterns, as to look as if woven in a loom; no two of them are alike. We were freely admitted into the inner corridor which surrounds the Sheik's tomb; the latter, as well as a canopy six feet high, which covers it, is made of mother-of-pearl of a beautiful pinkish hue. The floor is of jasper, and the walls of white marble, inlaid with cornelian; a cloth of silk and gold was spread over it like a pall, and on this were wreaths of fresh and withered flowers. A silk net which is hung around the canopy to keep little hands from "picking and stealing" the diamond-shaped pieces of mother-of-pearl, is hung all over by little charm tags, tied on by native ladies in the faith that such will bring them children, the old saint having a lustful reputation. The mosque, on the west side of the quadrangle, of older date than the tomb, is very elegant, and said to resemble the hall of the Abencerrages in the Alhambra, except that it is much larger, and built, not of stucco as is the latter but of

beautiful white marble. To return to the tomb, which the guide informed us was erected in one year from the wealth left by Shoik Selim Chisti at his death, and that it cost 37 lacs rupees (£370,000). In order that the reader may know more of this jolly old friar of Copmanshurst, I will give a short, rough translation of his history from the Persian :—

"Sheik Selim Chisti was a very holy man, who became known as such by his intimacy with tigers, several of whom lived with him in a cave on the hill where his tomb now stands. His renown reached the ears of Acbar, who, finding him to be a man of apparent sanctity and considerable wisdom, built the palace of Futtehpore-Sikree, it is said, to be near him. He consulted him on all important occasions, and, as the story goes, was finally indebted to him for an heir to the throne. For some time after Acbar's accession he was without a son, and twice demanded of the Sheik if he should ever have one. 'No,' said the latter; 'it is not so written.' Now he, the Sheik, had an infant son six months old; for these Moslem saints are the reverse of celibates. Upon Acbar coming to make the demand a third time, and receiving the same answer, this infant, who was present at the interview, suddenly spoke, although never before had he even lisped a syllable. 'Father,' said he, 'why do you send away the Conqueror of the World in despair?' 'Because,' said the Sheik, although he marvelled not a little at this—'there is no son written for him, unless another will give the life of a child destined for him: and who will do this?' 'If you will permit me, father,' said the infant, 'I will die that a son may be born to the Emperor'—and even before the Sheik signified his consent, he gave up the ghost. That day an heir to the throne was conceived, and in due time born. [There are scandalous persons, however, who say that this is an allegory, veiling a truth, and that the Sheik, in procuring an heir to the Emperor, did, in fact, give up his own son, but without destroying his life. Be that as it may, Jehan-Ghir, the son of Acbar, bore the name of Selim until he ascended the throne.]

TOM CRINGLE.

January 25th, 1864.

FUTTEHPORE-SIKREE *(Continued)*.

No. XII.

After another long, admiring gaze, we quit the large quadrangle, described in my last paper, by the eastern portal, and turning to the left, arrive amidst a complete labyrinth of palaces, courts, pavilions, tanks, gateways, fountains, and terraces, which

amaze one at the vast amount of patient and skilful labour employed to create all these magnificent buildings; and so well preserved are they, that one would think their inmates had just turned out to witness a tiger fight at the foot of the south terrace, so fresh and inhabitable does everything look; even the ornaments carved on them are as sharp as if finished yesterday; and the whole series of palaces have experienced no damage but what could be made good at a comparatively trifling expense. In a mile of space covered with these beautiful buildings, I did not see one disrupted arch. The only effect of time is to be seen in the verandah slabs, many of which have become loosened from their hold in the wall, and have slipped down their wall-plate—many to the ground, and yet have not broken. The royal residence of Acbar is perfect, except that some mischievous sportsman has fired a bullet through the centre of one of the panelled windows of filligree work.

Rajah Beer-Bul was the prime minister and friend of Acbar, who held him in high regard: and the picture we have of him from the Persian manuscript, would indicate him to be a very firm, open hearted, jovial old man. His palace is so perfect and well preserved, that it is furnished for the use of big-wigs who may visit the palace. On putting aside the *purdah* to enter, I should not have been very much surprised to have seen the royal Acbar and his favorite minister busy over a game of *pachisa*, whilst a newly-awakened Pathan guard had collared me preliminary to a quick march to execution—

Down in the tiger's den—

at the foot of the Dufterdar's office. It should be borne in mind by the reader, that Futtehpore-Sikree, as a country residence of Acbar's, stands in the same relation to Agra as Windsor Castle does to London, or Versailles to Paris; the distance as regards its comparison with Windsor (22 miles) would make it still closer.

It is said that these buildings were only in progress twelve years, and were completed in 1571, after which date Acbar held his court here for twelve years, but the holy Sheik having died Acbar gradually abandoned the place. But it is absurd to suppose that in so short a period were erected such a maze of palaces, mausoleums, extensive battlemented walls, tanks, fountains, baths, council chambers, royal mint, treasuries, wild beast dens, and a dozen other costly buildings, such as the royal stables for the court elephants, horse stables, camel stables; all of which are built in the same durable style as the best finished palace. It is also curious to see in the stables the guarded exclusion of any material (wood or iron) which might

lead to defacement by peculators stealing the iron, or by conflagration from wood—for fastening places for stabled animals, holes have been drilled through the angle of the pillar pedestals, through which a three inch rope may be rove and made fast. This is particularly observed also at the Dufterdar's office, where are holes made for fastening the horses of mounted orderlies, whom one can fancy just arrived in breathless haste. I even noticed sunken holes in the pavement of the verandah, like those in the fire-hole covers of a stove, whereby to lift them off with a hook, so placed that they had a suspicious look as if made to tie down delinquents for a brief space until their sentences were decreed.

After inspecting the Emperor's palace as well as that of Beer-Bul's, we examined the separate one assigned to his Christian wife, which, unlike the others, is covered with fresco paintings, evidently by Persian artists, as they represent the adventures of Rustum as related in Firdous's "Shah-Namah;" whilst in niches over the doors and windows are pictures of a different character, and of a religious significance. On one side are the Hindoo gods and goddesses—the elephant headed Gunesh Mahadeva, and Lukshmi; and on two other tablets, almost obliterated, but still sufficiently distinct to show that one of them is intended for the Annunciation. Acbar's toleration in religious matters is well known; among the ornamental designs of his palace the Greek cross is often met with, and it is related that when the Jesuits, who were numerous at his court, solicited Acbar's protection, he replied, "what would you have? See! I have more crosses on my palace than you have in your churches." In this same court is a pyramidal canopy, supported on four pillars, the cornice of which bears a representation of a serpent, and the whole building is made to approach the Hindoo style as near as may be without violating the architectural buildings around it, which may be classed as massive Saracenic. This was the residence of a Hindoo gooroo, or saint, whom Acbar kept near him from motives of policy.

But the gem of the palaces is that which was built for the Sultana, his wife, a royal daughter from Constantinople. Could European travellers who go to Spain to view the filligree stuccoes of the Alhambra, see this casket-like bijou of a palace, they would never quote the Spano-Moorish lion again. There is not a square foot of this wonderful display of the most chaste and artistic labour, but what bears the most unique designs carved in stone, the figures being now as sharp as on the day they were cut; and the admiration is intensified to find that no two patterns are alike.

The workman of those artistic days would appear to have entertained a horror of sameness—which is never tolerated except when it decidedly enhances beauty—such as the filligree worked panels or windows on each side of a doorway, where similarity has a balancing effect pleasing to the eye. There are numerous octagon pillars supporting the verandah which surrounds the palace, each of which is carved in the most elaborate style, representing foliage, with birds beautifully proportioned, and on which days must have been spent in giving sculptured beauty to a feather, or a grape tendril. All the Indian fruits are shown —a different kind, with appropriate feathered tenants, on each pillar. My feelings were moved in viewing this splendid monument of a king's love and regard. Regret seizes one that so rare a work of art should stand here in the haunt of the jackal and owl at night, and amid the solitude of a deserted city by day. One wishes for magic power to transport it to the centre of St. James's park, as a shrine of beauty dedicated to LOVE and TASTE, and for future Ruskins to write about, talk about, walk about, and enjoy to the end of time—it being of a style and beauty, combined with so much elaborated art, which the eye of succeeding generations would never tire to look upon. Speculating Barnum would give all his New York collection, including the Woolly Horse and the Feejee Mermaid, for this priceless gem of the East!

Close beside this fairy palace are very large fountains, intersected in the middle by paths, which cross at right angles and thus form four fountains. I should judge from their size, that beautiful water-plants grew in the basins of the fountains. There also stands close by, a large, cup-shaped bath cistern, hewn out of a solid stone. It is five feet in diameter and four feet deep. Did the pretty Sultana lave her delicate limbs in this? Another thought no doubt would occur to many, that, when the gallant Acbar first introduced his blushing bride to this fairy palace and its surrounding gardens, blooming with jesamine and roses, had ever woman such cause for pleasure, pride, and love?

To the east of this is the DEWAN-I-AMM, with a noble quadrangle 250 feet long by 100 feet broad, surrounded by pillared corridors on the four sides, with entrance gateways on the north, south, and east; on the west is a raised story, with a balcony in front on which Acbar usually made his public appearance in the morning with the great quadrangle filled with a crowd to see or petition him; and where he was greeted with a cry of "ALLAHO-ACBAR!" (GOD IS GREAT); to which he invariably replied "ILLI-LALALIHU!" (MAY HIS GLORY SHINE). This was a mode

of salutation introduced by himself, because the two phrases contain his name—"Iallal-uadeen-Acbar."

TOM CRINGLE.

January 28th, 1864.

FUTTEHPORE-SIKREE *(Continued)*.

No. XIII.

I continue the description of the splendid buildings at this place. South-west of the palace of Beer-Bul are the palaces with large quadrangles apportioned to Acbar's two sons, Feizi and Abul Fazl. These are plainer than many others, but they are nevertheless built with all the solid grandeur of the surrounding palaces; nor are they devoid of ornamental decorations. On the east is the zenana, consisting of some separate and other conjoined chambers for the ladies of the household, and also the Khawbgah of the Emperor, in which was a tank with fountains, and a garden wherein I noticed many fruit trees in a healthy condition. There is also a large bath about 20 feet square; on the north-east of this, beyond a boundary wall, which appears to be the work of a more penurious hand than that of Acbar, is the Panch-Mahalla, of a pyramidal form, of open arched terraces, five storeys high, supposed to have been used as sleeping places in the warm season; but tradition here halts in determining its use: some say it was for the servants to sit or sleep on, which I very much doubt, as it is in a fine commanding position, and it even overlooks several buildings in its immediate vicinity, and one of these is a pachisa-board, or marble pavement in black and white squares, the same as at the palace within the Fort of Agra, whereon the pieces were the beauties of the royal court dressed in rich silks of four different colours; on one side of the pachisa board is the Gooroo's seat of black marble, resembling somewhat the throne seat at Agra. Immediately north of this is the Council chamber, which, on the outside, would lead one to suppose it to be of two storeys, but on entering it we found the lower, or ground floor, with open arches, and a splendidly carved stone pillar in the centre, the top of which reaches to the level of what should have been the upper floor, but the pillar is crowned with a richly carved octagon seat with a filigree railing one foot high. But what invests this building with a curious interest is, that at each angle there are nar-

row stairs only wide enough to admit of one person ascending at a time; and at the top of each of the four stairs is a narrow pathway, formed of one long block of stone, connecting the gallery at top of the stairs with the central seat on the summit of the pillar, and along one of which, the person to get seated on the pillar throne would have to pass. It is a stranger whim than the pachisa board; for if we view it as a secure seat from the assassin's dagger, yet the royal life might be easily taken by the guards or ministers on the same level by a simultaneous assault.

It is surmised that the ministers used to sit at the angles on the top of the stairs whilst the Emperor gave orders from the central seat, which, from its position and isolation, would be one of dignity.

To the west of this last place, and on the north of Beer-Bul's palace, is an irregularly paved road, on a steep slope leading to "Elephant Gate," on each side of which are strong octagonal bastions, which would be deemed respectable in a military point of view in contending against modern artillery. On each side of the gateway are life size figures of elephants, from which the gateway takes its name; but, unlike most of the durable buildings of this Royal Trajan of the East, the heads have fallen from the bodies. After a lengthened search for the above heads, I found them in the police guard-house, and the sentry sitting fast asleep upon one of them. The figures of the elephants are well designed, and must have given a dignified and unique appearance to the gateway when in its pristine state. Passing onwards through the gateway down to the foot of the slope, we came to the "Hiran Minar," or Antelope Tower; it is about 90 feet high, and is ascended by an interior winding stair. The summit is surmounted by one of the light and graceful cupolas which give such a grand effect to the hundreds of roofs around us. Tradition says that Acbar used to mount up to the top of this tower, to take flying shots at deer and other game when driven by along the grassy plain below, which is bordered by a shallow lake produced by bunding-in the escape channel for the rain-falls of the neighbouring plain. By the aid of this bund the whole hill on which this City of Palaces stands, is surrounded, or nearly so, with a belt of jheels, or shallow lakes, frequented by water fowl in very large numbers. As to the tower, it is strangely decorated from top to bottom with blunt pointed elephants' tusks, made of the white sandstone obtained from the same quarries as the red. But the tusks are too short to have represented the true tusk shape, and from certain sunk chisel marks in the stone of the tusks I infer that these were made to receive a

coating of fine cement, and that real ivory tusks were fitted over the stone socket tusks. I obtained one of these by the unerring aim of a friend's rifle, the ball from which knocked one down, and it is now in the Bombay Museum. The ivory tusks have long since vanished. The idea is not felicitous, as the bristling projections offend the eye of taste whilst viewing what would otherwise be a handsome tower. In ascending this tower the mind is instantly busy with the thought that 300 years ago the royal feet of Acbar trod the same steps, and placed his hands along the wall in the same places which we did to support and guide our steps, it being quite dark, except at two or three look-out loop windows. At the foot of the tower, and opposite to the paved road leading down through the "Elephant Gate," is a long black stone post, to which the royal elephant used to be tied whilst his master was aloft on the tower. The very marks of the continual tying and untying of ropes are plainly visible around it. It is also interesting to notice the irregular stone pavement up the slope, which has been worn to a slippery polished surface by the heavy and continuous tread of the lordly trains of elephants which must have descended the slope in question, as the nearest and most royal exit from the hill palace to the hunting grounds to the north—and where report still sayeth plenty of game abounds. To a mind only moderately imaginative, it is continually conjuring up pictures and scenes in the life of Acbar whilst treading in the very footsteps, and often sitting in the very seats, which he must have used; the extreme durable character of every building around intensifies this feeling a hundredfold—it is like looking at our own Royal Alfred tending the cakes in the shepherd's hut.

A few tales relating to Beer-Bul will no doubt prove as interesting to the reader as they did to me; they are from the keeper of the Tomb, or Durgah, of Selim Sheik Chisty, and they possess the true Eastern flavour of improbable romance:—

"One day Acbar Shah and Rajah Beer-Bul were sitting together; Acbar said to Beer-Bul, 'what would you do if a great misfortune fell upon you?' Beer-Bul said, 'I should give myself up to pleasure.' 'How to pleasure,' said Acbar, 'when you were unfortunate?' 'Still I should do it.' The next day Acbar said to Beer-Bul, 'Take this ruby, and keep it till I call for it.' Now it was a ruby worth millions of rupees, such as there never was in the world before or since. So Beer-Bul took the ruby home to his daughter, and bade her keep it carefully, for it belonged to Acbar Shah; and she locked it up in a chest with three locks. Now Acbar sent to the greatest robber in the place, who was condemned to death, and had him brought before him. 'Robber,' said

he, 'I will give you your life if you can do one thing for me.' 'What is that?' said the robber, 'You must steal from my minister, Beer-Bul, a ruby which I gave him to keep,' said Acbar. The robber agreed, and no sooner had he gone into the city upon his errand, than he sent for a very cunning little old woman. There is now no woman living who is so cunning as she was, although—interpolated the Sheik with a sly twinkle of the eye—there are still some who would be a match for Eblis himself. Well, this little cunning old woman went to Beer-Bul's daughter and engaged herself as a servant, and she gradually so won her confidence that Beer-Bul's daughter showed her the box with the three locks, and the ruby. So watching her opportunity she stole the keys, opened the locks, took the ruby, and gave it to the robber, who brought it to Acbar. Acbar threw it into the Jumna river, and then sent for Beer-Bul. 'Bring me the ruby,' said he. 'Very well,' said Beer-Bul, and went home to bring it, but behold! it was stolen. 'Well, where's the ruby?' said Acbar. 'Your Majesty shall have it in fifteen days.' 'Very well,' said Acbar, 'but remember your head is security for it.' Beer-Bul went home and said to his daughter, 'We have fifteen days to live—let us spend them in festivity.' So they ate and drank, and gave feasts and dances, till in twelve days they had spent many lakhs of rupees, and there was not a pice left them to buy food. There remained thus two days. On the fourteenth morning the daughter of a fisherman, who fished in the Jumna, said to her father: 'father, the Rajah Beer-Bul and his daughter have had nothing to eat for two days; let me take them this fish.' Beer-Bul's daughter received it with many thanks, and immediately cooked it; but as they were eating it, there came a pebble into Beer-Bul's mouth; he took it out in his fingers, and, wah! it was the ruby. Next morning he went to Acbar and said, 'Here is the ruby, as I promised.' Acbar was covered by surprise, but when he had heard the story he gave Beer-Bul two lacs of rupees (£20,000), and said that he had spoken the truth—it was better to rejoice than to grieve in misfortune.

"Beer-Bul, as has been said, was Acbar's Prime Minister; he was a Hindoo, of great wit, wisdom, and erudition, and a philosopher withal, enjoying a large amount of the Emperor's confidence. One day as Acbar and Beer-Bul were out walking, followed by the state elephants, Acbar asked him which was the best, in his opinion—the collective strength of a whole army, or the individual wisdom of a clever man? Beer-Bul answered, 'The wisdom of a clever man.' The Emperor then made signs to the mahout of his elephant to make the animal rush on and attack Beer-Bul, which was done; this man of expediency instantly seized a pariah dog by the tail which was sitting close by, and swinging the howling dog in the air brought it with great force on the head of the elephant, who immediately turned tail and ran off screaming with fright to his stable. Beer-Bul turned round to the Emperor saying, 'Where is the strength of your army gone?' The Emperor

was so pleased with his presence of mind, under trying circumstnaces, that he ordered him a new dress of honor, and promised that he would never do anything without consulting him.

"Another time Acbar was out hunting and lost his way; he suffered much from thirst, and chancing to see a labourer cutting sugar-cane, he rode up and asked the man to give him a piece to chew; the man went into the midst of the khet and brought a large cane. The Emperor then asked the man what was the necessity for his going into the midst of the field to get a cane, when there were plenty close by. The countryman answered, 'The king is worthy of the best; I brought the largest in the field.' Acbar then asked him that if he knew he was the king, why he had not made an obeisance, which was a king's due. The man answered, 'The obeisance is rather due to me; I have received no benefits or favour from the king, whereas the king has from me.' Acbar said, 'There is some truth in this fellow's reasoning;' and, taking off a signet ring, he gave it to the man, and told him to present himself next day at durbar, and ask a favour, at the same time returning the ring. When Acbar returned home he told Beer-Bul of the affair, who blamed him very much for giving such a valuable ring to a peasant, and with which he could do so much harm. Acbar averred that he could trust the man; Beer-Bul said that the ring was gone for ever. The man did not present himself at durbar next day, and many months passed away without hearing anything about the ring, further than Beer-Bul's continual reproaches to the king for his folly. Now it chanced that Acbar and Beer-Bul were riding out one day in the country, when the Emperor espied this very countryman engaged at the plough; he told Beer-Bul of it, and asked his advice. Beer-Bul said, 'If the man is innocent he will continue his ploughing, but if guilty, he will run off into the jungles upon seeing you.' The king approached, but the man went on with his work. Acbar then asked why he had not come to the durbar and brought back the ring. The man said, 'Oh king, as I was returning that evening to my village, I chanced to take the ring out of my pocket just to see it was all safe. The kotwal happened to oversee me, and immediately had me seized, banged on the feet with lathies, and your ring taken by force from me, saying, What punishment is due to a thief who has stolen a ring? He also warned me that if I made any complaints about it my lot should be vile.' Akbar then said, 'Why did you not report this at the durbar the next day? You would have had justice.' The countryman answered, 'Oh king, would such an one as I have been believed? I should have been put in prison, perhaps have lost my life.' Beer-Bul said, 'There is truth here, but it is mixed with error; let us go to the village, and see the kotwal.' Acbar ordered the countryman to be mounted on an elephant, and show the way to the village. When they neared the place, the king and Beer-Bul went on ahead, and entered the kotwal's house, who made profuse expressions of delight at the visit, and professions of devout obedience to the king, who kept his eye on the man, and saw him take off a ring

from his finger and conceal it in his waistbelt. The king then ordered all the head people of the place to be assembled, and asked them if they were satisfied with the kotwal; they all with one accord poured forth his praises, saying, 'That their destiny was good to be under such a worthy man.' Now the kotwal was the veriest villain in the world, and was hated, but much feared because he had the signet of the king, by means of which he carried on all kinds of oppression, extortion, and injustice. The king then said, 'How much is your salary?' and the kotwal told him it was 50 rupees a month; the king then asked, 'How is it that you can live in such magnificence upon 50 rupees a month? Explain this, that I may take a lesson, and reduce the expenditure of my kingdom.' At this close questioning the face of the kotwal became white with fear. The king then said to the head men of the village, 'You are all well satisfied with the kotwal, but I will produce one of you who is not so; and he then gave orders for the elephant with the ploughman on it to advance. When the kotwal saw him his head fell on his breast, and the dark shadow of confusion overspread his face, and speech left his lips. The villagers, when they saw the turn affairs were taking, loaded the kotwal with abuse and revilings of his tyranny and oppression. Such is the way of this world. Acbar ordered all the property of the kotwal to be confiscated and given to the ploughman, whom he made kotwal instead; and also ordered a fine of 1000 rupees to be levied on the village because the men had spoken false before him—and this was to be given to the religious mendicants. The former kotwal had the plot of land and hut of the husbandman given him for his lot. The ploughman turned out an honest man, and was afterwards advanced to the situation of inspector of chillars, which was a very lucrative appointment. Beer-Bul said, 'The seed I have sown has increased a hundred-fold; my advice is no longer required by you, oh king; your wisdom now exceeds mine.' The kotwal's name was Fyz Buksh, the ploughman's was Ramdeen.

"The Emperor Acbar was given to repartee, and the making of riddles; one of these was—'Why is a melon like a woman?' *Answer.* 'Because if the melon falls on the knife, or the knife on the melon, the latter is always the sufferer.' The wit of this I leave the reader to discover, but remember it was a royal joke, so you are bound to consider it very clever. Another time Acbar and Beer-Bul were taking the air in the state barge on the river Jumna. The Emperor was turning round in his hand a valuable rosary, called in the native language *mala*, which chanced to slip off his hand into the river. Acbar called out to Beer-Bul '*mala do*,' (give me back my rosary; also meaning, bring and give me your mother). Beer-Bul replied, '*bahne do*,' (let it go, also meaning give me your sister). This play on the words may be difficult to be understood by the English reader, but is considered the acme of repartee by natives."

TOM CRINGLE.

February 11th, 1864.

FUTTEHPORE-SIKREE (*Continued*).

No. XIV.

Futtehpore-Sikree takes its name from the village of Futtehpore, situated at the south end of the hill, and Sikree on the north; but in the palmy days of Acbar the whole hill must have been alive with a population more or less dependant on the court and its gay followers. In the same year in which Acbar's palace was finished Sheik Selim Chisti died. His durgah was not built till a later period. I have not attempted to describe one-half of the buildings on the hill. At the time of my visit (once repeated) every building was stamped on the retina of the eye, but their local position to each other not having been noted at the time, the memory—loaded with the architectural beauties of such a maze of magnificence,—has failed in the less important point of locale, except it be that of the largest and most important buildings. Besides those described, there are the remains of a mint, of baths, streets, serais, and of private houses, of which there appears a whole closely built street on each side of the grand entrance road from the summit to the walls at the foot of the hill. This was no doubt the Regent Street of the place; in it were all the jewellers, goldsmiths, dealers in rich kin-hobs and spotted muslins, and also the armourers, those cunning workers in chain mail for which this part of the East was once so famous. And although it is not customary in the East to expose to view the costly wares of merchants who deal in jewels and ornaments, yet they were no doubt safe in the bottom of double-locked chests. The interest of the scene, no doubt, chiefly consisted in the different races of men by whom the hill was thronged. Here the fair complexion, Jewish features, fine form, and bright colored robes of the Affghan—there the round pot-bellied Banian from Guzerat, with soiled chupkun, and the lobes of his ears hanging 2 inches down weighted as they are with massive gold ear-rings, here the bare head and beautiful muslin clothed Bengalee, with quick observant eye, and rapid speech, his feeble frame, and drumstick legs, in deep contrast with the graceful, well-knit frame, red turban, thick moustache, broad, well poised head on a handsome neck and shoulders, well filled chest, and stout calves of the Rajpoot, who is armed to the teeth, and as ready for a fray as a Scottish Highlander in the 14th century, when strolling through a lowland city. Observe the fat man with his head as clean shaved as a side of Wiltshire

bacon, whose vast breasts rest on his vast stomach, and whose vast stomach rests on his vast fat thighs;—he is copying Sanscrit for one of the many lovers who are burning to sing a sonnet to their mistress's eyebrows. Mr. Taylor, an American, and also a Persian scholar, has attempted a sketch of one day's court life at this famous place. We are told that the palace of Futtehpore was completed in the year 979 Hijri, which answers to our year 1571. If we take this year for our sketch day, with this beautiful hill of palaces for the theatre, its moving throng of courtiers as the *dramatis personæ*, with the royal Acbar then scarcely thirty years old, it would be true chronologically, but it will give a greater interest to the scene and events if we roll forward our day to a much latter period, when the Emperor's sons were grown up around him, when his power was thoroughly established, and the effects of his genius had manifested themselves, and when he was advancing in years, but had yet the chief ornaments of his court around him. The writer says:—

"It would be very easy to describe the events of a day in such a manner that an Oriental scholar should be able to point out but few mistakes; for the information afforded us, both by the emperor's own son, and by Abul Fazal, is so minute, that following it we could not well be wrong; but as our object is to illustrate the place, the events we shall imagine will be immediately suggested by the uses to which we suppose the different buildings were appropriated.

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"It is scarcely day; but already a roll of drums, and cannon discharged, break rudely and abruptly the silence of the 'solitary morning.' The emperor is an early riser, and the moment of his rising from his couch is announced in this noisy fashion. You will remember that there is a door opening to the south in the khwabgah, into the space on the opposite side of which the duttar-khanna stands. Before this doorway, shortly after the roll of the drums, a considerable crowd assembles; immediately at the entrance are drawn up double lines of chobdars or mace bearers, each carrying a silver-stick; outside of these are burkundazes and other armed attendants. In front, and conversing together in groups, stand handsomely-dressed men who are evidently, both by their deportment, and by the respect they meet with from the miscellaneous crowd which girds in the whole scene, courtiers of influence and reputation. One feature of the *ensemble* must not be omitted; no one wore beards, except, indeed, such strangers as might be casual spectators, and whom neither interest nor necessity had compelled to conform to the etiquette of the court. The door of the khwabgah opens, the drums thunder from the noubutkhana over the great door-way of the palace. A nakib issues forth, mace in hand, and proclaims, in that monotonous tone so familiar to dwellers in the East, the titles of his

master; immediately after him appears in the door-way a broad-chested man of somewhat advanced years, he is simply dressed, but there is a certain chasteness in its simplicity which shows that some little care has been taken to produce it. The material is white muslin, but gold thread is introduced in many parts with a very tasteful effect. You remark his arms—they are so unusually long; his face is very clear, and the color of the blood so discernible, as to give a rich tinge to his olive complexion; his eyebrows are joined and lowering, which tends to give a severe expression to the excessive bright eyes which they half conceal. This is Acbar. His appearance is the signal for a loud and general cry of ALLAHO ACBAR to which the emperor, standing in the door-way a moment and bowing very slightly, answers ILLI-LALALIHU. This mode of salutation and its answer were introduced by himself, and it will be observed that the two phrases include his name IALLAL-UADEEN-ACBAR. The courtiers now press forward, and are severally noticed with kindness; then forming a ring around round the emperor, the whole procession moves on foot towards the dúrgah. Acbar was very early to-day, and the azan had not yet been proclaimed. Whilst they were moving slowly along, the voice of the muezzin was heard from the high cupola of the durgah gateway. The first words he uttered were the same as those which the submissive multitude had just repeated ALLAHO ACBAR (God is great!), but coming from the serene height, and in a slow, solemn chant, they seemed to bear a more pregnant meaning, and to suggest to a contemplative mind the full interpretation which the eloquent Massillon once gave them, who, when preaching the funeral sermon of the 14th Louis, commenced in a deep undertone, *Louis est mort! Dieu seul est grand!* There was one amongst the attendant courtiers, who, on hearing the first sound of the azan, stood perfectly still. He was a man of sharp, severe features, and noted as the most rigid Mahomedan about the court. It is directed in the Haddis, that if a person be walking when the azan is sounded, he stand still and reverently listen. Abdul Kadir, the bigoted historian (for it was he), was not likely to omit obedience to the sacred ritual. A gay man of most polished manners, who was walking by the emperor's side, looked round when Abdul Kadir was left some little distance behind, and, catching the emperor's eye, they both laughed. This was the celebrated Abul Fuzl, well-known to be as lax in matters of faith as Abdul Kadir was rigid. The whole party had now reached the eastern gate of the durgah, on the steps of which an attendant received the emperor's shoes, as no one was permitted to pass within that sacred precinct except with bare feet. The beautiful quadrangle, which was now entered, has been justly admired by strangers from a distant and more civilized continent as a perfect work. On the western side is a lofty and noble mosque; on the southern a massive and imposing gateway, rising high into the air, and seen for many a mile from the level country beneath, standing up against the brightness of an eastern sky on the north, but erected apart from the cloisters which run all around

the building, is the shrine, the tomb of the Sheik Selim Chisti, who is said to have predicted the birth of Jehangeer, and from whom that prince, previous to his accession, bore the name of Selim. The actual tomb is of mother-o'-pearl, but enclosed in a small chamber of white marble, which is itself again enclosed in a larger chamber of the same material. This outer chamber is lighted by large squares of that lattice-work which has rendered the Moresque architecture celebrated throughout Europe, and beautiful ruins of which still astonish, whilst they delight, the wanderers in Spain. The rich creamy tinge of the marble, the elaborate yet exact design of the tracery, the completeness of the finish, render these lattices, perhaps, unrivalled in the world. The corbels which support the veranda roof outside, resemble somewhat the shape of the figure S, of which there are several, but they strike one as out of character, being evidently of Indian design.*

"In the middle of the quadrangle, prayer-carpets were spread opposite to the mosque, and the relative of the Sheik, who was now the mutuwallie of the durgah, was present to read the prayer. The Emperor and his courtiers formed themselves into one long line, and prostrations and other attitudes were performed by the whole assembly in concert, which formed a curious scene. After prayers, the emperor passed for a moment within the tomb of the Sheik, for whom he entertained an affectionate remembrance, casting upon it the simple tribute of a jessamine flower. When he returned to the gateway, by which he had entered, elephants, led horses, and mounted outriders, were found in attendance. As the noble elephant upon which Acbar mounted rose from the ground, guns fired, drums were loudly rolled, and the procession swung into motion to the voice of the nakib, whose sonorous compliments and adulation were taken up by a large crowd of spectators. As the emperor passed along, his train was swelled by many courtiers, dependants, and others, who, having made their salaam from some conspicuous corner, put their horses in line. The name of the Hiran Minar having been whispered about, it became generally known that the emperor was going to indulge in a little matchlock shooting.

"The deer tower is within the walls immediately under the hill in a north-westerly direction. There is a paved road leading to it from the place, which passes under a large gateway, called the Hathi Pol, or Elephant Gate, from two of these animals sculptured in stone, which stand one on each side of the entrance from without. Acbar appears to have thought the massive shape of the elephant an imperial and appropriate ornament to a gateway; for it will be remembered that after the defeat of Jeimal, the emperor caused figures to be cast of that chief and his brother, which he placed upon carved elephants erected by the gateway of the fort of Delhi; and many years after, the French traveller, Bernier, visiting that place was impressed by these vast statues

* I beg to dissent from that opinion. T. C.

with feelings of respectful awe. It was a gay sight when Acbar passed under the Hathi Pol. First a troop of cavalry, their spears glittering, their horses fretfully champing the bit; then chobdars, and chuprassies with red turbans and sashes, on camels; amongst them, the nakib still vociferous; the leading courtiers on elephants surrounded the emperor's elephant, and the mighty animals roll along, tinkling with bells and waving their rich trappings as they go. Other courtiers and officers of the palace follow on horseback, each with their own burkandazes and attendants on foot. A band of the rude but not ineffective music of the country accompanies, and their drums are briskly answered by those of the durbanan from over the gateway. The Hiran Minar is a single tower, standing by itself on a small raised platform. The lower part of the shaft bristles with the not very pretty ornamentation of imitation elephant's tusks. They are of stone, covered with chunam, and the tusk is squared off as they usually are in large animals.*

"The emperor ascended to the top of the tower, attended only by an old chuprassie, who carried two matchlocks. After Acbar had amused himself for some time firing at deer, which were driven across an open space at a fair distance for the minar, he sent word down that he was now satisfied with sport, and ordered a review of cavalry to commence which had been arranged for that morning.

"A man now ascended the minar, richly dressed, his countenance not wholly unpleasing, but still haunted by that terrible expression of uncertainty of temper, which so marked his character—it was Prince Selim. He saluted his father, and stood by his side looking on as the cavalry came into sight. There was a fine young man leading the troops, mounted on a showy horse, who every now and then glanced up to the minar, as if for approval; this was Prince Khusru, Selim's son. He had recently got his mansab, and was as proud of it as lad could be.

"The inspection of cavalry concluded, Acbar and the Prince came down, and mounting on elephants, moved in procession towards the palace. There is a large serai on the right of the minar as you return to the Hathi Pol; travellers of many nations were standing in front of this place, having come out to see the emperor pass; amongst them were two men of swarthy hue, dressed in ecclesiastical cassocks. The emperor's eye immediately caught sight of them, and he, apparently knowing what nation and calling they were of, gave an order for them to attend him in the evening.

"When Acbar arrived within the palace, he alighted at the gate of the building, which is now the Tahsil; here he partook of a repast, and afterwards sent for the Rajah Beer-Bul. The Hindoo chief, a man of agreeable and cheerful features, came over, plainly dressed, in a palki (or large open litter), accompanied by his secretaries and a few footmen,

* They are too short for the imitation suggested.—T. C.

and was soon at work with Acbar in political papers and converse. It was now a busy time in the town—marketing was going on in the streets, men were washing and dressing in the public manner the East admits of; some were cooking, and others were eating their food with the peculiar solemnity of Oriental meals. In one place was loud haggling about a bargain, in another some bunniah was vociferating *dohai padsah* against a trooper, who had taken much more atta than was right for his money. Everywhere bustle and life.

"At twelve Acbar dismissed the Rajah after a hard morning's work, wishing to be left alone, as he said, for a meditation on the orb which then stood at the meridian.

"And now came on the noon of an Indian day, whose picturesque features familiarity has not concealed from the perception of native poets. The Rajah Sudraka, in his drama of the 'Toy Cart,' thus describes the mid-day scene:—

'The Cattle, dozing in the shade,
Let fall the unchamped fodder from their mouths:
The lively ape, with slow and languid pace,
Creeps to the pool to slake his parching thirst
In its now tepid waters; not a creature
Is seen upon the public road, nor dare brave,
A solitary passenger the sun.'

"And more poetically the great Kalidasa says in the Hero and Nymph:—

''Tis past mid-day. Exhausted by the heat
The peacock plunges in the scanty pool
That feeds the tall tree's root: the drowsy bee
Sleeps in the hollow chamber of the lotus,
Darkened with closing petals: on the bank
Of the now tepid lake the wild duck lurks,
Amongst the sedgy shade: and even here*
The parrot from his wiry bower complains,
And calls for water to allay his thirst.'

"Can this be the Futtehpore of three hours ago, all slumber and silence—drowsy shrouded figures stretched on every shop-board, scarce a soul in the streets!

'The very houses seem all asleep.'

Pompeii could scarcely be calmer.

"The city woke from its repose by three o'clock. Acbar had spent the afternoon in a sort of desultory chat with Abul Fuzl and Feizi; he had sent for them about one o'clock, for he had happened to remember the two priests who were standing at the serai in the morning. And then, from remembering them, his thoughts passed to other priests who had come before, and with whom he had had discussions; so he sent for his two friends to consult what difficult questions should be put to the priests, and to chat, generally, on the subject of religion. The laxity of Acbar's faith as a Mussulman, and his singular freedom

* The scene—a garden.

from bigotry, has led some to regard him as an earnest inquirer, from whom, unhappily, the circumstances of his birth, education, and position concealed the truth; and, in this point of view, he has been compared to Scipio. That he was constantly jesting with Pilate, asking, 'What is truth?' there can be no doubt, but he seems to have been more interested in the question than its answer. He was more amused at new doctrines, new theories, new objects of veneration, than burdened with the difficulties which surrounded the acceptance of any of them.

"When Abul Fuzl and Feizi were leaving the emperor, another party was seen approaching the palace. The principal figure amongst them was a young man reclining in a languid way in a litter; he was very gaily dressed, and was leaning on one arm, laughing and talking to his servants. Feizi and Abul Fuzl were just getting into their litters as this new arrival came up. They immediately advanced a little way, and bowed with great respect. He nodded in a familiar sort of manner back, and passed on towards the palace without stopping to speak to them. An interview between Acbar and his youngest son, Prince Danial—for the new arrival was he—was always a melancholy affair. The emperor's affection for the youth was great; but even affection's eye could not escape seeing the shadow of ruin on poor Danial's countenance. He was drinking himself to death: and neither passionate entreaties, nor stern warnings, nor menace, nor ridicule, could arrest the slow but inevitable suicide. This interview resembled, in all respects, many that had preceded it. Fair promises and angry threats on the emperor's part met by sullen silence from the prince; then nature getting the better of both of them, Acbar wrung his hands and fell in tears on the youth's neck—and Danial, whose nerves were too much out of order to stand a scene, sank into maudlin hysterics of alternate weeping and laughter. By the time this visit was over, the shades of evening came on. The roar of the town swelled, but it seemed unlike the same sound in the morning—there was a subdued exhaustion perceptible, in character with the heavy atmosphere and the dead sky. The emperor, attended by his household servants, passed on foot out of the palace, where he had spent the day, into the khwabgah; he sat for a short time there, in the garden, by the side of the fountain, and partook of fruit, then putting a costly shawl over his shoulders, and taking a jewelled sword in his hand, he moved into the *diwan-i-khass;* carpets were spread in the middle of the square, and cushions of faint blue velvet and silver laid on them. When Acbar was seated, he ordered Abul Fuzl and Feizi to be admitted. They were close at hand, and entering, were directed to sit down. Then the two ecclesiastics were summoned, whom the emperor had seen in the morning at the serai. One of them was a young man of pleasing countenance; the other much older and of a very battered appearance. The elder priest held up a crucifix in his hand as soon as he entered, at which Acbar smiled, and putting his hands together, slightly bowed his head. Abul Fuzl, at this juncture, remarked with

a malicious sneer, that he was sorry Abdul Kadir was not present. The emperor laughed, and immediately sent for him. Conversation with the Portuguese priests was a difficult matter, but it was effected after a fashion. The discussion was not very profitable, for it consisted chiefly in Acbar relating cures, which had been effected by Mussulman saints, and miracles which had been wrought at their tombs, and insisting that if the priests' religion were true, they ought to be able to authenticate it with miracles. The priests replied, that in their own country there were relics of good men, which had often effected cures, and being esteemed very precious, on account of these supernatural qualities, people were not willing that they should be removed out of the kingdom. Conversation was going on in this desultory way, when the younger priest remarked that he had something very singular to show the emperor, if it was his pleasure to see it. Acbar said that he wished to see everything novel and rare, and begged the priest to exhibit it. The young man feeling in a pouch under his cassock, said that he required a light. This was immediately ordered, and then he, retiring a little, applied the fire to something which he held concealed in his hand, after which smoke was seen issuing out of his mouth. At this Acbar laughed contemptuously, and said, that every juggler in the country that frequented fairs would do it ten times better. 'Why,' he cried, 'they will bring fire out of their nostrils as well as smoke. If your magic was no better than this, you would not make one rupee a month.' This badinage was put an end to by the young priest explaining, that there was no feat intended in producing the smoke, but that the curiosity was, that the smoke itself was very soothing and agreeable, and that from partaking of it, the mind of man became philosophic and cheerful. The priest then opened his hand and showed a small clay pipe, he also exhibited some of the fragrant weed from out of his pouch. Acbar was much interested, and sent immediately for Hukeem Abul Futteh Gilanee to ask his opinion of the herb. He insisted in the meantime on trying it, much against the remonstrances of Abdul Kadir, who was now present, and who assured him that it was a device of the devil, and had probably been brought direct from his satanic majesty by his servants and emissaries, the priests. When the hukeem came, he found the emperor coughing very much, for Acbar not being quite up to the mysteries of the pipe, had swallowed a good deal of smoke, and was suffering accordingly. The hukeem with a grave face examined the herb, and afterwards being ordered by the emperor to try it, declared that it was a pleasant, and possibly, a healthful weed, but that the smoke required purifying before it was imbibed. 'What is it called?' asked Acbar. 'Tobacco,' answered the priest. Acbar agreed with the hukeem, that the smoke would be better for purification, but inquired how this could be effected. The hukeem replied that he thought it might be made to pass through water, and from that night he commenced the series of experiments which ended in the invention of the hookah.

"Shortly after, the priests obtained permission to retire. Acbar then rose up and went with his friends through the aperture in the wall, which leads into the *dewan-i-amm*. There were great crowds of people in this enclosure, anxiously watching the little door, which opens at the back of the throne gallery. As soon as Acbar appeared through this, and took his seat, a great shout of applause rose up from all sides. In this place he sat nearly half an hour, talking and laughing with Abul Fuzl, who stood by his side. Occasionally a horse would be put through the menage in front of his seat: now a wild-looking man would try and attract his attention with a pair of tiger cubs; or a jogee, with both his arms stiff and attenuated from being held up aloft, would stand, like a prophet denouncing a city. At length another shout announced that the emperor had again withdrawn into the *dewan-i-kass*; and now, seated with a small circle of courtiers around him, he reclined back on his cushions to listen to an old man with a white beard, who was going to give an Oriental version of the ring of Polycrates. More stories succeeded to this, and when at length the old man's voice ceased, after the last tale, no approbation followed. However, the complete hush, after the long flow of animated words, awoke the emperor, and bidding farewell to his friends, he moved off into the khwabgah for the night.

"And now the city was mostly silent; but there was a large house in a lane below the brow of the hill on which the palace stood, from which, though all the doors outside were closed, a sound of music and singing was heard. This dwelling belonged to a friend of Prince Danial, a young springal of a chieftain, who was rapidly spending a large sum of money, which his father had accumulated. The courtyard in the centre of this house was lighted with torches, and on one side on cushions lay a small party of young men amongst whom was Prince Danial; on his right, sat Mozuffur Khan plying him with wine, who was the master of the house. A company of actors were exhibiting on the other side of the court, and going through a buffoonish scene. After the acting, a nautch commenced, to which the spectators paid considerable attention, as the principal danseuse was a girl who had lately arrived, and whose name was Choonee. She was Hindoo by birth, and had handsome Rajpootanee features.

"Let us leave the convivial party, and ascend the gateway of the Sheik's tomb. All is dark and silent—rising from the city amidst the few specks of light beneath, come the cries of watchmen; while from the darker mystery beyond the walls, swell faintly and dismally the bark of jackals, and the sudden yelp of fiercer beasts. A night breeze blows over one, like that dreary wind which in Moslem belief is to precede the day of judgment. Why is there such terror—such awful forlornness in its moan? The air is big with doom. Danial is to find the death of horrors he is seeking. For young Khusru a life of trouble and imprisonment and a sudden end is in store. The gay head of Abul Fuzl is to

be brought one day, dripping with gore before his royal master. Acbar is to come one midnight to the couch of Feizi—but he cannot hear; he is spitting blood, and barking, and dying, in agonies. The cheerful Beer-Bul is to be murdered far away, amongst the Eusufzai; and when the inevitable hour comes to the emperor himself, his son and his grandson are to be intriguing over his death-bed for the vacant diadem. Thus as over the flowers of pleasure, so too, over the gems of glory, is ever discernible the trail of the serpent!"

The hill on which we have so long lingered in describing the beautiful buildings by which it is capped, cannot but be interesting to the geologist, as it is one of the strangest upheavals I have either seen or read of. As I have before stated, the range is about ten miles long, with dips which nearly reach the level of the plain. It is situated in the valley of the Jumna, level as a bowling-green. There is a similarly looking range to the south-east of Futtehpore. The soil is a mixture of sand and clay much imbued with nitre. There is no stone to be had for building purposes within a hundred miles or so. Yet here has Dame Nature applied her plutonian fires, and in one hour of time, perhaps, baked in one *olla-podrida* this handsome and most durable sandstone, from its primal elements of sand and clay, and upheaved it a hundred feet high, for man to quarry from to the end of time. But from what source did she get her beautiful magenta dye to give such a durable colour to the stone? And, still stranger, how did she manage to colour the chief bulk of the upheaved mass, and yet in its very midst, leave large patches of a light, buff colour? And more strange than all, some of the stone is of a deep red, or rather magenta colour, with round buff coloured spots, arranged, as to distance and position to each other, with strange regularity.

It is remarkable too, that there should be a depressed belt around the hill as if it had settled down to the extent of the bulk upheaved. Such a quarry in the neighbourhood of London would have caused it to have been the handsomest city in the world; whereas here, at Delhi, and Allahabad, with a few other places, this truly beautiful and very durable fine-grained sandstone has only been used for the construction of a few forts, mosques, palaces, and mausoleums. The people have not shared in this rich gift of nature one jot; there are no public buildings of any description, or bridges across the nullahs and rivers which intersect the country. The very road from Agra to Futtehpore-Sikree, was not bridged till the work was done by the East India Company. I observed brick towers about 8 feet diameter at the base and 25 feet high, at intervals of about four

miles apart along the road; they are now in ruins, and no one can tell for what purpose they were used. I noticed that the outsides were full of holes, as if they had been, when first built, studded with elephants' tusks like the "Hiran Minar." I am therefore persuaded that these pillars or towers were situated at the halting stages, and when the emperor travelled from Agra to Futtehpore at night, they were illuminated.

TOM CRINGLE.

February 22nd, 1864.

CAWNPOOR.

No. XV.

After staying a week or two at Agra I went back down the railway line to Cawnpoor, and thence to Lucknow. The Cawnpoor station is a fine building, and has a noble portico facing the city; but I have been sadly puzzled to know why railway designers persist in going so far away from large cities, thus putting their inhabitants to a perpetual expense for hire of passenger vehicles and for haulage of goods. The railway is made to pass this important city at a distance of three miles, while the intervening land is only barren semi-swamp soil. In like manner, the Bombay, Baroda, and Central India Railway is one mile away from one side of the walled City of Ahmedabad, whilst the barracks, camp, and all the civil and military staff are two miles from the city on the *opposite* side. There may be judicious reasons for taking the railway on the one side of a city, whilst the army who should protect and hold it against an enemy are three miles away, but I cannot appreciate them. The Great Indian Peninsula Railway, also, runs four miles to the right of the large and important city of Nassick, for some mysterious reason which people have been trying to discover ever since the line was made.

At Cawnpoor there is nothing of interest but scenes relating to the Mutiny. I will here digress to say a few words on the general reprehension expressed when writers inveigh against the ruthless murderers in the mutiny of 1857. I do not share this feeling, and although I never went to see a man hung, I would now freely walk twenty miles to put the noose over the head of any villain who took part in the atrocities of that period. I do not, and never did, believe in the guilty participation of the

mass of the population of India, and especially so of Western India, while to suppose it of the educated part of the people is simply monstrous. If we had one leprous spot it was the heart of the city of Poonah, composed chiefly of Brahmins, who have become emasculated by leading a beggar's life, fed from the crumbs of the Peishwa's table. I believe that in Bombay the only people who would have joined a rising were the low Mussulman population. It was the Mussulman population of Bengal and the military mutineers who bathed themselves in the blood of our poor defenceless women and children, and if respectable natives choose to associate themselves, *as natives*, with the blood-stained wretches of the mutiny, and to apply to themselves remarks nearly solely addressed to such men as enacted the horrors of Cawnpoor, I can only pity their warped understandings. But I do not believe that educated natives ever do take unto themselves anathemas levelled at the mutineers. The idea has been fostered by the Press, until clemency would seem to be the only virtue to be exercised on the murderous Mussulmen of Bengal. I here fearlessly declare that retribution stayed her hand too soon, when our deep wrongs are considered. The enactors of the mutiny misinterpret our clemency; an Eastern untutored mind only respects a strong iron hand and swift vengeance for murder inflicted.

I visited the poor weak intrenchments into which General Wheeler so unadvisedly gathered his handful of troops, with the European civilians, and I felt a thrill of pride that my brave countrymen could hold this weak post for six weeks against a powerful army, who had a well furnished arsenal to supply its wants. I inspected the arsenal, situated on the right bank of the Ganges, and felt lost in astonishment that General Wheeler did not occupy it; he could have laughed the mutineers to scorn had he done so. Of all the devoted band who marched out of the well defended intrenchments only three finally escaped.*

Government deserves great praise for the manner in which it has laid out the grounds which formerly surrounded the building where our countrywomen, with their dear children, were so ruthlessly murdered. To look now at the smiling picture erected by art and taste out of this beforetime place of mournful sadness, no one would believe that such dreadful deeds had been committed. A splendid public garden of many acres has been enclosed with one of the most massive, handsome Gothic railings I have ever seen; the patterns for which were made, and the railing cast, at a foundry in Bengal, the name of which

* If any one wishes to read a thorough detailed history of the Cawnpoor Mutiny, they should read Mr. W. T. Shepherd's Narrative, published at the *Delhi Gazette* Press, Agra.

has escaped me. I never saw better castings, and their effect when erected is very fine. There are several large double cast-iron gates to match; they were not ready when I was there, but I learn they have since been erected. The main entrance gates are flanked on one side by a sweet little Gothic lodge for the gatekeeper, and the gravelled road, 30 feet broad, leads up to the "Cawnpoor Memorial," which is a pure pointed Gothic octagon, with seven lancet windows in each face, except the entrance face, which has only two such windows on each side of the doorway, the steps leading to which are ten in number and are arranged sexagonally. This building is not roofed in, nor is it intended to be, as it forms a screen only around the true tomb, which is built over the Well. When I saw it, only the pedestal was erected to bear the Christian allegorical figure which is to be placed on it. I learn that this is to be Faith in Adversity, a female figure resting on a cross and pointing upwards. It is the gift of Lord Canning; and this noble work of art from the chisel of Baron Marochetti will form an object of intense and painful interest to all Englishmen. The following touching lines on the fate of Mary Wheeler, daughter of the General, may here be given. They are by Miss Mary E. Leslie.

Mary Wheeler.

Brave English girl! 'Twas well done! We who mourned
In downcast, melancholy, tearful mood,
The helpless weakness of our womanhood,
Deeming ourselves but objects to be scorned,
Felt strong and self reliant, when we learned
How thou, in midnight's awful solitude,
While phantoms of the dead around thee stood,
And o'er thee with their sad eyes vainly yearned,
Didst stand, Avenger, by the deep well's brink;
Within thy small, fair hands the dripping blade,
Which thou, with heart unknowing how to shrink,
In thy foe's life blood hadst most crimson made,
Then plunging in the far down waters sink,
Thy maiden spirit, sad but undismayed.

The building is built of a light drab-colored sandstone of a very tough grain. On the interior faces of the walls, which are some fourteen feet high, are recessed Gothic panels, beneath which is a frieze of the most beautiful vine wreaths in bold and graceful relief, which the most severe taste must admire. The old English lettering round the top rim of the pedestal, and in one of the recessed arches of the door-way, are so beautifully cut that the spectator is lost in astonishment that such delicate work could find either designers, or artists to execute them in India. The only three men saved out of General Wheeler's entrenched

force was Captain Thomson, Lieut. Delafosse, and a private named Murphy, who has been put in charge of the Cawnpoor Memorial, about seventy yards from which a very pretty pure Gothic cottage has been built for him to reside in. The poor fellow appears to have had all his wits driven out of his head. The Gardens deserve a better guide, notwithstanding Murphy's claims to the post. I took the trouble to show him how to weed the grass from the tombs of others of our murdered countrymen who are buried in a little railed-in enclosure to the left of the "Memorial," as approached from the great entrance-gates. Close to the Memorial is the living trunk of a large Moulsurree tree, on which the brave Colonel Neill hung up the wretches concerned in the massacres near the spot. The following lines by Miss Leslie merely shadow forth the horrors of the deed :—

The Massacre.

But all is over;—the fierce agony
Of men who could not their beloveds save
From unheard tortures, and a common grave,
Heaped high with quivering, crushed humanity,
The frantic woe of women forced to see
Their tiny infants, unto whom they clave
With love which could all fear and torment brave,
Dashed down upon the ground unpityingly:
And nought remains but the wet, bloody floor,
And little rings of soft, white baby-hair,
Mingled with long dark tresses, dimmed with gore,
In hopeless tangles scattered here and there,
And God's own blessed Book of the Holy lore,
Sole comforter amid that deep despair.

Then quickly followed the avengers; and here is their soldier oath. It speaks of no mercy. Let us hope that their vengeance was not man's, but worked out by God, and that they were His instruments wherewith to punish the guilty.

The Oath of the 78th.

We, holding in our hands this soft dark hair,
And having in our hearts the bitter grief
Of her who owned it, and to whom relief
Came but with death's sharp agony,—we swear,
By all for which most reverently we care,
For each throughout his term of warfare brief
Together with his hands a bloody sheaf
Of lives, whose sum may with these threads compare.
Brave sons of Scotland! ye will nobly keep
The oath ye uttered thus besides the well,
What time thoughts stern, and fierce, and wild and deep,
Made your hearts bitterly within you swell,
Remembering aye that terrible, dark leap,
That maiden glorious without parallel!

General Neill.

Alas! a song is oft dashed by a tear,—
A bright day darkened by a rainy cloud,—
A festal roof by joy's weight over-bowed,—
A bridal train met by a sable bier,—
And ofttimes, when the trumpet rings out clear
In tones of triumph full, and long, and loud,
Low muffled drums behind a bloody shroud
Smite with a dull, deep sadness on the ear.
Our "victory is dimmed." O Heart so brave,
So dauntless, self-reliant! O firm hand,
Wielding the dazzling sword which Justice gave
A moment to thy grasp with strong command!
We thinking of thy red and early grave,
'Mid joy of triumph, sad and downcast stand!

This "Jotting" has been a sad one, but I must conclude it with a touching picture of a brave Christian man meeting death with his brave wife. Here we see the old Viking blood welling up from its sleep of centuries to assert its old indomitable courage—a courage which never despairs though hope has fled. We see the same never-yielding courage in our American brethren, although exerted in a cause which only heathendom rejoices in, but whereat all Christians lament.

Major Skene and his Wife.

Stand firm a little longer, fair true wife,
With thy pale face so sad, and yet so grand
In its deep calm, the sight whereof has manned
My agonizing heart. The air is rife
With thickly showering bullets, and the strife
Grows more despairing. Load with thy white hand
Steadily, dearest: now in this red land
We fight more for a stainless death than life.
'Tis all in vain; they swarm around, and we,—
We two, with this brave dead one at our feet,—
May not withstand. I kiss thee tenderly,
They shall not torture thee, nor grieve thee, sweet,
I nerve my hand,—my arm enfolding thee,—
In quietness our rescued spirits meet!

TOM CRINGLE.

February 25th, 1864.

LUCKNOW.

No. XVI.

At the Cawnpoor station dak-gharries are in waiting when the trains arrive, to take passengers on to Lucknow or elsewhere. The distance to Lucknow is 50 miles, and the charge is sometimes Rs. 9, when business is slack. I paid for a fine new roomy gharry Rs. 12. When passengers hire dak-gharries for long

distances the hirer should give it a close inspection to see that the cushions are not stuffed with brickbats, that the overhead nets for holding small stores are in good order, that the shelf over the foot part is in its place and not in the carpenter's shop undergoing repair, that the wheels don't wobble, and that the tyres are in fair order—and especially that the sliding-doors *will slide*, and that the sun-screen pent curtains at the sides are in a sound condition. There are numerous dak agents in all the large towns, and intending passengers will do well to pay them all a visit and take the lowest offer if the gharry is of an average quality; but if you have to travel far, a good new gharry is worth a few rupees extra. I got a very good one from Davis's agent at Agra—Rs. 118 for the 440 miles to Lahore, which is cheap travelling considering that I had a servant, with whose traps and my own we mustered about 3 cwts. of luggage. Dak-gharry travelling on the smooth roads of Bengal is very comfortable; it is like being in the cabin of a ship, and having arranged all the little odds and ends which minister to your comfort, you soon get accustomed to the motion, and, after a time, feel as comfortable as if you were in a room. I am confident I could travel for a month together without feeling the least tired. The Government should license people to run dak-gharries, and appoint an inspector or two to see that the poor horses are fed with some semblance of humanity. At present they get a maximum of work with a minimum of food, and oceans of ill usage.

On leaving Cawnpoor, you have to cross from the right to the left bank of the Ganges by a bridge of boats. When you arrive at the bridge the horse is taken out and a pair of bullocks attached; these draw the vehicle over the bridge and through a deep margin of sand which lines the opposite bank for about half a mile, and the traveller then reaches the hard main road. I was eight hours in doing the 50 miles to Lucknow. The road has not one feature to interest the traveller—the country looks bare and bleak, with few trees to enliven the barren land. I must not omit to mention that I saw crocodiles close to the left bank of the Ganges, and amongst them boatmen were swimming and wading with the greatest unconcern, in fact with a want of care which induces the belief that these reptiles never touch natives: whether they equally respect white skins I know not. One great convenience to be obtained in all the large towns in Bengal and the Upper Provinces is a decent buggy and horse, which can be hired for a whole or half a day at Rs. 2 per day. Thus equipped, I first started to cantonments to deliver a message to one of the handsome fairies which shed their light and love on mankind, but

alas, both Titania and Oberon had removed to Seetapore, 50 miles away, and I had no time at my disposal to extend my journey. Not a quarter of a mile from cantonments, the road leads through a grove of mango trees, and what in the distance I took to be a pack of pariah dogs, turned out to be a group of large monkeys, who sat on the side of the road as I drove past, and looked so companionable that I should not have been much surprised at their asking what o'clock it was, or enquiring as to the probable quality of the next sugar-cane crop. My object was to see the buildings made famous by the mutiny of 1857 ; and the nearest from the cantonments on the eastern side of the city being the Dilkhoosah palace, I drove there. I found it inhabited by some high Staff officer, whose servants looked at me as I approached the building as if I had come on a looting expedition for silver forks and spoons ; however, I looked my fill and then departed for the Martiniere. The Dilkhoosah is a large ugly building in a lump block like some of the very large country residences in England : there are a lot of Mambrino-helmet looking ornaments in bright scoured brass on the roof, such as we see as the top ornament to railway signal-posts. All around as far as I could see, was a mere jungle waste ; it may have had surrounding glories to boast of, but they have certainly departed.

The Martiniere was built by General Claude Martine. He designed the plan and elevation of it, and when nearly finished Asf-o-Dowla expressed a desire to buy it, and offered to give a million sterling for it. His death, however, broke off the bargain, and General Martine himself died before it was finished, and directed that it should be completed out of the funds he left, to endow a school there. He ordered his body to be buried in it as a precaution to prevent any future ruler from confiscating it. During the rebellion some of the mutineers dug up his tomb and scattered his bones, some of which, however, have since been restored to their original resting-place.

I can only remark that Asf-o-Dowla was a man who had more money than wit. The building itself might pass for a country gentleman's seat, designed by a mad architect, having a loud, Vauxhall, tawdry air about it, but the plaster figures which so plentifully occupy the walls of the garden and parapets of the house would cast an air of ridicule over the Parthenon itself were it so embellished. They are on a par with some of the clay and whitewash figures with which the wealthy natives delight to line their gardens. The rebels' cannon-shot has disarmed several, and severely wounded others. One group or

rather line of these figures offered a capital Munchausan shot in the flank to the rebels who held the Dilkhoosah, which would have mowed them all down, but such good luck was against taste and beauty, and there they now stand, when they should be sent home to occupy the dreariest corner of the Chamber of Horrors in the Marlborough-House School of Design. The only redeeming point about the place is a handsome pillar, something like Pompey's pillar at Alexandria. It stands in a small lake, but why built I cannot imagine.

Lucknow would furnish most noble photographs of its royal and other public buildings, but as compared with the palaces, mausoleums, tombs, and forts of Acbar's and Shah Jehan's days they are nothing but lath and plaster, always excepting the great Imambarra. With Agra so near to give tone and hints of lofty design and beauty, yet the portals leading to the several palaces are—after the burst of architectural genius which shed its lustre on Acbar's reign—again stunted to the limited poverty of the Eastern mind, which plainly shows that the mantle of those who built for Acbar and Shah Jehan three centuries ago, has not fitted the shoulders of the Vauxhall architects of Lucknow a century since. It is curious to notice the still existent talent, now in Agra, of the descendants of those wonderful ornamental stone carvers who have so beautified the splendid palaces in its neighbourhood. The lofty conception of the mind has fled, whilst the daily-trained cunning of the hand has nearly maintained its pristine excellence, as may be seen by a visit to the Bombay Museum, where the beautiful and unique carvings in soap-stone may be inspected. The birds and foliage on the palace corridor pillars at Futtehpore-Sikree are identical in beauty and finish.

But to return to Lucknow. After reading the accounts of the glorious siege of our brave countrymen within the narrow bounds of the Residency, I have not the temerity to go further than express my own feelings on visiting the locality where such soul-stirring scenes were enacted. The Bailey Guard is a common brick-built arched entrance to the Residency, flanked on each side by the enclosure wall, with the guard-house on the right as you enter. It is without the slightest pretension to architectural beauty, except what it now possesses, bored through as it is in a hundred places by cannon-shot, and the musquet balls having pitted it over like plums in a Christmas pudding. This famous guard-house stood between the enemy's fire, city-ward, and the Residency. In contemplating the shot-riddled ruins of this now historical place, the spectator's feelings

are divided by manly pity for the sufferings of the delicately-bred women and children, and the sick and wounded, who suffered so long and with such enduring fortitude when beleagured by a cruel and treacherous foe; but, shutting out this view of suffering humanity, he turns with fierce pride and dilated nostril to do homage to the lofty valour of his countrymen in holding so long such a poor, defenceless place against the united force of a well-equipped native army. The reader may again be reminded that the enemy had great facilities for mining up to the besieged batteries, as only the breadth of the public road intervened between them and the sloping bank of the *Gôomtee* river in their front. The enemy, once under the sloping dip of the river bank, could mine and countermine in safety until they arrived within ear-shot of the ever vigilant besieged.

In the burial ground are many bright names which will long live in history; it is quite close to the Residency. I was much struck with the mean iron railings round the tombs of those great heroes killed in the mutiny, whom their country should delight to honour. The work is of a style and finish which the most common village blacksmith should feel ashamed to put out of hand. This is particularly the case with the tombs of Sir Henry Lawrence and Lieut. Augustus Otway Mayne. The latter was killed at the relief of Lucknow, and is buried on the left-hand side of the road leading from the Martiniere, westward. The low, shabby brick wall round his tomb will fall to pieces in a year or two more—the shabby little pigstye-befitting-gate is already hanging in ruin—the letters on his tomb are not cut deep enough, and consequently will soon be obliterated. The same remarks apply with equal force to the tomb of Sir Henry Lawrence, some of the letters on whose tomb are even now beginning to look dim and worn down, and the black-filling of the letters has long since disappeared. The record slabs of tombs should not, in this corroding country, be placed on the top, where, to read the inscription, one has to half climb the railing and stretch his neck like a camel-leopard; they should be deeply recessed in handsome scroll mouldings at the ends or sides, where they would be sheltered from the beating rain and the corroding influence of the sun, and they should also be faced with ¾-inch plate glass. In the same burial ground, to the right as you enter, is the memorial tomb of those who fell belonging to the 5th Madras Fusiliers. It is one of the most noble and suitable tombs I have ever seen. An Octagon pointed Gothic, with deep, handsome panels in the faces, into one of which is let a finely-lettered white marble tablet bearing

the names of the brave men who so courageously engaged countless numbers, and who laid down their lives with the devotion of Greeks at Thermopylæ.

It is worth noting that Imperial Lucknow, that city of brick and plaster palaces, cannot boast of one hotel. All travellers who, like myself, have no friends there must put up at the travellers' bungalow—one of the largest, most strangely built, uncomfortable buildings I ever took shelter in. It is partly furnished with an upper storey, but which overlooks a large hall underneath into which the occupant above can look his fill of the residents below. The man who designed it should have a Dundreary medal.

The new church built at Lucknow from a fine on the city for the one destroyed by the mutineers, is a fine Gothic building. I did not examine it closely, but its outward aspect and surrounding site is noble and pleasing, and reflects great credit on the E. I. Company's engineer who designed and built it, but whose name I was not fortunate enough to procure. I take from a guide-book an account of the principal buildings of Lucknow; the description is very barren, but is good enough for the buildings described, as, with the exception of the Imambara, the whole of them have an unmistakeable Vauxhall Garden look, upon which a traveller fresh from the chaste and beautiful buildings in and around Agra will scarce design to cast his eyes. The interior of the Hoseinabad Imambara, for instance, is the very fac-simile of a chandelier shop in London; it is more than crowded with glass chandeliers, for it will not hold another, but the trustees of this tomb, with more money than taste, determined to fill the floor as thick with pyramids of chandeliers as they had crowded the ceiling. As you enter, tasteless Musselmen look at you with surprise that you don't fall back struck with admiration at the finest of crystal drops before you. The head man asked for *bucsheesh*—boasting the while that, on the evening before my visit Rs. 30,000 had been spent in cocoanut-oil alone for illuminations, it being the durgah day of Mahomed Ali Shah and his mother, who lie buried there. I told him that his race only lived to eat, smoke, and lounge about in idleness, and whilst other races were seeking education they alone remained in lazy ignorance; and I pointed out to him what a fine endowment Rs. 30,000 annually would be for schools to educate his race, in lieu of losing it in smoke. I don't think this view of spending the durgah funds had ever been so explained to him, for he withdrew the *bucsheesh* hand, and made a burra, double-handed salam. Had I the power I would appro-

priate these stupid, vain, and wasteful endowments for the purpose of founding schools and colleges wherein to educate the descendants of these stupid defuncts, but as a compensation the pupils should annually sing a soothing annexation requiem over their graves.

A Short Account of the Principal Buildings of Lucknow.

"1.—The canal was a work began in Nuseer-ood-deen Hyder's time at a vast expense, and with no very intelligible object. Raja Bukta-war Singh was the inventor of the idea, and seems to have persuaded the King that it would bring the water of the Ganges down to Lucknow, and be equally beneficial to commerce and to agriculture. It was not planned by any European Engineer, and as might be expected proved a complete failure. It made the fortunes of several contractors who made off with the money they received, on which the work stopped. It was used by the rebels in the siege of Lucknow as their first line of works.

"2.—The Chief Commissioner's house, or Hyath Bux (life giving); the Secretary's or house Dar-ul-Shufa (house of curing or hospital); the pile of buildings now occupied by the Artillery and known as the Begum Kothie; the Kunkurwallie Kothie, occupied by the Brigadier Commanding the Station; the Deputy Commissioner's house or Noor-bux Kothie (light giving); the Badshah Munzie, which is now incorporated into the Kaiser Bagh; the Cheenie bazaar and the Tehrie (or crooked) Kothie, were all built by Sadut Ali Khan during his reign, while carrying out his plan of beautifying the eastern portion of the City, as his half brother Asf-o-Dowla had done the western. Most of these houses were given as residences to his sons, others were kept vacant to please the Royal mind with a sense of novelty whenever he might wish to change 'from the red room to the blue,' and the Tehrie Kothie was where he transacted business of State. Many of these houses have acquired notoriety from the events of the rebellion. In the Chief Commissioner's house the gallant Major Hodson breathed his last. At the Begum Kothie a fierce resistance was made, and many a sepoy met his well-earned fate from the bayonets of our stormers. From the top of the Noorbux Kothie Sir Henry Havelock overlooked the 3rd line of defences, and saw his way into the Kaiser Bagh, and till lately the walls bore the impress of a shower of grape aimed at him from the guns below.

"3.—The Secunder Bagh was built and laid out by Wajid Ali Shah, who gave it to one of his wives, the Secunder Mehul, from whom it got its name. Intrinsically there is nothing in it deserving of notice; its fame arises from the tremendous retribution that here overtook nearly two thousand rebel sepoys at the relief of Lucknow by Lord Clyde.

"4.—The Kudum Rusool, or prophet's foot print, is a beautiful place of worship, built by Gazee-ood-deen Hyder on a mound artificially raised. It contained a stone bearing the impress of the foot of the Prophet, brought from Arabia by a pilgrim. During the rebellion the holy stone was carried off, but the author of the sacrilege is not known.

"5.—The Nujuf Ashraf, more commonly called the Shah Nujuf, is the tomb of the first King of Oudh, Ghazee-ood-deen Hyder, built by himself for this object. It derives its name from Nujuf, the hill on which the tomb of Ali, the son-in-law of Mahomèd, is built, of which tomb this building is said to be a copy. A fund was left by Ghazee-ood-deen to keep the place in repair, and to maintain an establishment of priests. It was before this tomb that the Commander-in-Chief met with the severest opposition in the relief of Lucknow. Sir William Peel's heavy guns were brought up close under the walls, which they battered for upwards of two hours, and it was here that Brigadier Adrian Hope distinguished himself, by going alone to seek for an unguarded wicket-gate, which he found just as our troops at last made their entrance by the breach.

"6.—The pile of buildings known by the name of the Motee Muhul, and now occupied by the Commissariat Establishment, includes three separately-named and distinct buildings. The Mootee Muhul properly so called, was built by Sadut Ali Khan, and forms the northern part of the enclosure. It owes its name to the fancied resemblance of a dome in it (now destroyed) to the curve of a pearl. Along the river face Gazee-ood-deen Hyder built the Mobaruk Munzil and the Shah Munzil, the latter being close to the present bridge of boats, the former east of it. The Shah Munzil was the scene of the celebrated wild beast fights. The smaller animals were put to fight inside the enclosure of the Shah Munzil, and the combats between tigers, &c., also took place there, strong cages and a safe arena having been provided. But the fights between elephants and rhinoceroses, which required to be viewed at a safe distance, took place across the Goomtee on the level ground in front of the Hazaree Bagh, the King and the court watching them from the verandah of the Shah Munzil.

"7.—The Tarawallie Kothie or Observatory was built by Nuseer-ood-deen Hyder, under the superintendence of Colonel Wilcox, the Astronomer Royal, and was provided with very excellent instruments. The Colonel died in 1847, and Wajid Ali Shah dismissed the establishment. The astronomical instruments were carefully put by, but disappeared in the rebellion, and were probably broken up by the rebels. The Fyzabad Moulvie, Ahmedullah Shah, (known as Danka Shah, from his always having a drum beaten before him when he went out,) made it his head quarters during the rebellion, and the rebel Parliament used frequently to hold its meeting there.

"8.—The space in front of the Tarawallie Kothie, between it and

the Kaiser Bagh, is fraught with melancholy and solemn recollections. In this spot two separate parties of Europeans, one consisting of those sent in by the Dhowrara Rajah (Miss Jackson, Mrs. Green, Mr. Rodgers, Mr. Carew, Mr. J. Sulivan, on the 24th September 1857) with the addition of some persons captured in the town, deserters from the Bailey guard; and the other of the victims of the Mithowli Raja's gratitude and hospitality (Sir M. Jackson, Captain Orr, Lieutenant Burns, Sergeant Morton, on the 16th November 1858,) completed the tale of sickness, imprisonment, indignity and despair, by suffering a cruel martyrdom. A memorial has been put up to commemorate these massacres almost on the spot where they occurred. Both of them were chiefly owing to the fury of the defeated sepoys when they could no longer resist the advance of General Havelock, and of the Commander-in Chief, but both were also instigated and encouraged by the leaders of the rebellion and the nobles of Oudh. One of these leaders, Raja Jeylal Singh, a man of large territorial possessions, and of great influence with the mutineers, followed the first party of prisoners to the fatal scene, and mounted one of the gates of the Kaiser Bagh, since destroyed, in order better to feast his eyes on their dying agonies and to applaud the prowess of his sepoys. Two years had elapsed since that time, he had been received into favor, his rebellion had been condoned under the amnesty, haply he persuaded himself that the memory of that deed had faded away, that even he might hope to die the common death of all men, and be visited by the visitation of all men. But justice, though slowly, was following surely in the criminal's tract. Like the storied cranes of Ibycus, it came on him when he least expected it, from the quarter where he thought himself safest. His own confidential servants turned against him, link after link a wonderful chain of circumstantial evidence developed itself, and heaped the guilt with deadly certainty on his head. On the 1st day of October, 1859, on the very spot where his crime was committed, he paid the extremest penalty of the law. And this was followed on the 12th of October, by the execution of Bundeh Hussein and Futteh Ali, who had hunted down and brought into Lucknow some of the poor captives massacred here.

" 9.—The Kaiser Bagh, the great work of the ex-King's reign, was commenced in 1848, and finished in 1850, at a cost, including furniture and decorations, of eighty lacs (£800,000). Kaiser is the same word as Cæsar, a title adopted by the kings of Oudh, and used by them on the Royal seal. To describe this place, it will be best to suppose the visitor to enter at the North-East gateway, which faces the open space in front of the Tarawallie Kothie. Through this gate and through a small gateway on the right hand which is now closed up, the captives were conducted to their prison. We, however, pass up the open Court in front of the gate, called the Jillokhana, or place where the Royal processions used to form up and prepare to start from, and turning to the right through a gateway covered by a screen, we cross the Cheenie

Bagh (so called from the large China vessels with which it was decorated), and going under a gate flanked by green mermaids, we come to the Huzrut Bagh. On the right hand we have the Chandjewallie Baradarrie, which used to be paved with silver, and the Khas Mukam and Badshah Munzil which used to be the special residence of the king. The Badsha Munzil has been before alluded to, as having been built by Sadut Ali Khan, and included by Wajid Ali Shah in the plan of his new palace. His Vizier, Nawab Ali Nukie Khan, used to reside above the mermaid gateway we have just passed under, in order that he might be close to the king, and obtain instant information of all he was doing. On the left we have the large confused pile of buildings called the Choulukhie, built by Azeemoolah Khan, the royal barber, and sold by him to the king for 4 lacs. It formed the residence of the chief muhuls and of the Queen. The rebel Begum held her court here, and it was in one of the stables near this that our captives were kept for weeks. Proceeding along the road way, we pass close by a tree paved round the roots with marble, under which Wajid Ali used to sit in the days when the great fair was held, dressed in the yellow clothes of a Fakeer. Moving onwards we pass under the great Lukhee gate, (so called from having cost a lakh in building,) and come into the magnificent open square of the Kaiser Bagh proper, the buildings round which were occupied chiefly by ladies of the Harem. In the month of August, a great fair used to be held here, to which the whole town was admitted. Proceeding past the Stone Baradurre, now fitted up as a Theatre, and under the western Lukhee gate, which corresponds to the eastern one just described, we have on our left the building known as the Kaiser Pusund, surmounted by a gilt semicircle and hemisphere. It was built by Roshim-o-Dowla, the vizier of Nuseer-ood-deen Hyder, and confiscated by Wajid Ali Shah, and given by him as a residence to a favorite muhul, Mashook-ul-Sultan. In the under-stories of this building the Dhowrera party of captives were confined, and from it they were taken to be killed. On the right is another Jillokhana, corresponding to the eastern one by which we entered the place, and turning down it we find ourselves outside the Kaiser Bagh, and opposite the Sher Durwaza, or Neill gateway, under which General Neill was killed by a discharge of grape shot, from a gun posted at the gate of the Kaiser Bagh which we have just left.

"10.—Between the great quadrangle of the Kaiser Bagh and the Cheenie Bazar stands the two tombs of Sadut Ali Khan (called after his death by a sort of apothesis, Jinnut Aramgah, or the one whose soul is in Paradise) and of his wife Murshid Zadie. Both these tombs were built after their death by their son Ghazee-ood-deen Hyder, who thereby displayed a very uncommon amount of filial affection. The spot on which Sadut Ali's tomb now stands, was formerly occupied by a house in which Ghazee-ood-deen Hyder lived during his father's reign, and it is reported that, when he came to the throne and occu-

pied Sadut Ali's palace, fully appreciating the change in their respective situations, he remarked that as he had now taken his father's house, it was but fair that he should give up his own to his father. Accordingly he gave orders to destroy his former abode, and raise on the site a tomb to Sadut Ali Khan.

"11.—The Chutter Munzil was built by Nuseer-ood-deen Hyder as a residence for the ladies of the Harem, he himself occupying the adjoining palace called the Furhud Bux." It takes its name from the gilt umbrellas (chutturs) with which it is adorned, not as is generally supposed, from its being a four storied house. It is now partly used as the Deputy Commissioner's Office; the river face which still shows the marks of General Outram's guns is to be fitted up for a durbar and for public rooms.

"12.—The Furhud Bux (or giver of delight) was the Royal Palace from the time of Sadut Ali Khan, till Wajid Ali built the Kaiser Bagh. That part of it which overlooks the river was built by General Martine, and sold by him to the Nawab Vizier. The rest of the building, and the great throne-room itself, was built by Sadut Ali Khan. This throne-room known by the names of the Kusr-ul-Sultan, or the Lal Baradarrie (now used as a Post Office) was set apart for Royal durbars; and at the accession of a new King it was the custom for the Resident to seat him on the throne and then present a nuzzur to him, in token that the British authority confirmed his assumption of the Government. It was in this room that the attempt on the throne by the Padshah Begum and Moonna Jan took place, which is recorded by Sir W. Sleeman in the second volume of his journey through Oude, and it was in pursuance of this custom that the insurgents attempted to force the Resident, Colonel Low, to present an offering to Moonna Jan as he sat on the throne, thinking thus to confirm the usurper's authority.

"13.—The Residency is far too famous a place, and too generally known, to require a very detail description. When Asf-o-dowla resided in his palace the Dowlut Khana the Resident was accommodated in one of the buildings attached to it, but when Sadut Ali made the Furhud Bux his own dwelling place, he built the Residency close to it. At first no military guard was attached to the Resident, but when Colonel Bailey held this office, a guard of honor was appointed, and a house built for it by Sadut Ali close to the gate of the Residency enclosure, which thus obtained its world-famous name of the Bailey-guard gate. The plans and descriptions given in Mr. Gubbin's and other books, are so full and complete, that it would be superfluous and almost presumptuous, in a brochure like this, to go over the same ground again.

"14.—The iron bridge over the river Goomtee was brought out from England by the order of Ghazee-ood-deen Hyder, but he died

before it arrived. His son Nuseer-ood-deen Hyder directed it to be put up in front of the Residency, just where a small temple and ghaut now stand on the opposite side of the river. He gave the contract for erecting it to his own Engineer, a Mr. Sinclair, who commenced sinking wells (which are still visible) on which to found the piers, but failed before any great progress had been made. The bridge was thus again delayed, till Mahomed Ali Shah, the next King, took up the project and completed it.

"15.—The Stone Bridge was built by Nawab Asf-o-dowla about the year 1780.

"16.—The present Muchee Bhowan Fort includes a much larger space than the old fort of that name, which consisted only of the building on the south of the road, noticeable for its round earthen bastions. This was the old fort of Lucknow, and was famous for its strength fully two centuries ago. According to an old proverb, he who holds the Muchee Bhowan holds Lucknow. In the historical sketch prefixed to this account, the early history and former name of the fort were detailed. The high ground across the road within the defences of the fort surmounted by a small mosque, is Luchmantela, the site of the original Lukshmanpore. Behind the Muchee Bhowan itself in a south-west direction, an open space occupied by ordnance stores, marks the sites of the Mobarak Mohulla and Puch Mohulla, the oldest houses in Lucknow, built by the family of Sheiks who formerly owned territory here. When Sadut Khan, the first member of the late reigning family, came here as Soobadar in 1732, he hired these houses from the owners at a monthly rent of Rs. 565. The money was paid at first, but by a natural transition of sentiment, his successors got into the habit of looking on the houses as their own, and after Sufder Jung and Shuja-o-dowla had respectively written agreements to pay rent, but had never done it, Asf-o-dowla gave up that farce altogether, and confiscated the houses outright. It is well known how on the 1st of July, 1857, the garrison which held this Fort evacuated it and joined the Residency, and how skilfully and successfully it was blown up by the retreating party.

"17.—The great Imambara, the architectural gem of Lucknow, was the crowning work of Nawab Asf-o-dowla's reign. He is said to have spent incredible sums on it, and the native report, always prone to exaggerate, puts the cost at a million sterling. The architects were invited to submit their plans to a competition, Asf-o-dowla only stipulating that the building should be no copy of any other work, and that it should surpass anything of the kind ever built, in beauty and magnificence. Kyfeeut-ollah was the name of the successful competitor, and it would be hard to say that this conception as it stands before us in the present day, falls at all short of the large and liberal stipulations of the monarch. The building is as solid as it is graceful, built from very deep foundations, and no wood-work is used through-

out. Its dimensions are said to be 167 feet by 52. Asf-o-dowla, at his death, was buried in it.

"18.—The Jumma Musjid, which stands close by, is not in any way remarkable. It is a copy of the building of the same name at Dehli.

"19.—The Roumie Durvaza, or Turkish gate, was built by Asf-o-dowla after a plan which was supposed to be taken from one of the gates of Constantinople. But persons who have visited Constantinople, and know it well, declare that there is no gate standing there now, which at all corresponds to this one, and it seems probable that the Nawab Vizier was the victim of a deception in this point. If he had expressed a wish to build a gate in Turkish style, we may be sure that twenty plans, all perfectly genuine and drawn on the spot, would be presented to him next morning.

"20.—The Hoseinabad Imambara was the only architectural work completed by Mahomed Ali Shah, 3rd King of Oude, but though inferior in grandeur to some of the work of his successors, it is the rival of any of them in beauty of detail. The garden which occupies the quadrangle is somewhat disfigured, being crowded with a bad model of the Taj and other similar buildings. The Hooseinabad Imambara presents a very fine appearance when illuminated at night, and in the grand days of Lucknow it formed the chief attraction of the Mohurrum. Mahomed Ali Shah buried his mother and directed himself to be buried in it, and left a very large fund to keep up the splendour of the Imambara. The Darogah who had the charge of it previous to the rebellion was the well known photographist Ahmed Ali Khan, whose scientific pursuits and extensive acquaintance with Europeans did not prevent his joining the rebels heart and soul, and obtaining the title of General in their service.

"21.—Along with the Hoseinabad Imambara Mahomed Ali Shah built a magnificent tank, which stands by the side of the road; and began a Musjid which was intended to surpass the Jumma Musjid in size, but which he never lived to complete. It stands still unfinished with the scaffolding gradually rotting away, untouched since the day he died, eighteen years ago. He also began a watch tower, a 'sut khunda' or seven storied tower from the top of which he might look down on his finished work, 'the great Babylon that he had built,' and enjoy its beauty and splendour, but the work was never finished, and the tower only reached its fourth storey.

"22.—The Moosa Bagh was laid out as a garden by Asf-o-dowla, and the house was built by Sadut Ali Khan, who made it his favorite country residence. In his reign the wild beast fights used to take place here. The native account of the name is that Asf-o-dowla, out riding in this direction, killed with his horse's feet a rat, and, afflicted by this accident, built a tomb over the mortal remains of the rat, and named the garden after it (Moosa meaning a rat). Another and more

probable account is that the house was built, under Śadut Ali's direction, by a Frenchman, whose name tradition has lost, though it preserves in the word Moosa a remembrance of its prefix, Monsieur.

"23.—There are no buildings in the city itself particularly worthy of mention for their beauty, or interesting for their antiquity or historical associations. The Chouk was built in Asf-o-dowla's time, but of the two gates at each end of it the southern one is said to belong to an earlier date. It is called the Akbarry Durwaza, and native report goes that Akbar Shah himself passed through Lucknow on his way to Nepaul, and after reducing the Raja of Nepaul to submission, returned through Lucknow again and set up this gate. This story is not supported by history, and is for many reasons unlikely, '*Post hoc, ergo propter hoc*' (if we may parody it to mean 'named after a man, and therefore built by him') is a principle which explains the origin of a great many native reports and local traditions. A more likely story is that one of the Soobadars of Oude built and called it by the name of the founder of his Soobah.

"24.—Proceeding along the Cawnpoor road from the Chouk we come to two singular Durgahs, or Mahomedan shrines, one, the Kasmain, built by Shruf-o-dowlah, and said to be a copy of the tomb of the two Imams, Moosa Kazim and Reza Kazim at Khorason, and the other built by Dianut-o-dowlah on the model of the tomb of the Imam Hossein at Kurbal. But except when these places are illuminated for the Mohurrum, there is nothing to repay a visit, and they seem built to test the extent of ugliness which human ingenuity is capable of reaching. The Durgah of Huzrut Abbas is another place of sanctity and resort. Here Sadut Ali is said to have received a sudden 'awakening,' which changed him from a wild and vicious young man to the sober practical statesman he became. But this story is rather apocryphal. Mulka Jehan's great house is remarkable for its vast extent, as being a town of itself in the heart of the city, but on no other account is it at all interesting."

TOM CRINGLE.

February 28th, 1864.

RETURN TO AGRA.

No. XVII.

After my visit to Cawnpore and Lucknow I returned to Agra, the principal buildings of which I have already described.

The public gardens and bandstand of Agra ought to be objects of much pride to her people, as they are well laid out,

and are watered on a scientific plan. The Bandstand would do honour to Kensington Gardens or the Green Park, even Windsor Castle does not possess a finer one. It is on a raised artificial mound some 10 feet high and 150 feet diameter. This mound is furnished with fine stone seats, at intervals around its outer circumference. It is divided by broad cross paths, with easy flights of steps leading to the lower gardens; the turf is always kept of a refreshing green by nightly floodings of water. The bandstand proper is very handsomely built of stone, with music-stands resting on classically-carved stone lyres, stringed with half-inch brass wire. The whole arrangement is very pleasing and tasteful. I trust that some generous individual will supply funds for importing earth better suited to flowers than the vile soil of the surrounding neighbourhood. Some of our rich red soil would make all their plants and creepers laugh with joy, and produce a very kaleidoscopic harvest of flowers. They have a fine creeper, which I have not seen on our side of India. It is the second large trained creeper on the right hand, going from the bandstand towards the obelisk erected to the memory of General Sir John Adams.

Agra is a very neat and clean town in the suburbs; the native city is decently clean. I think it was a mistake to remove the seat of Government of the North-West Provinces from this healthy and central city, with its many regal buildings suitable for the occupation of the British representative of our national power, to Allahabad, which has the reputation of not being so healthy. The railway which will connect Bombay with Calcutta, joins the East Indian line at Allahabad, but there is little doubt but what the projected line from Hurdah, on the Great Indian Peninsula line, to Indore, will ultimately be carried on to or near Gwalior, a little west of Agra, and on through Bhurtpoor to Delhi. This route would obviate the necessity of crossing the Jumna, except by the bridge which the East Indian line has now under construction, by which to enter Delhi. There was, however, good reason for taking the line from Jubbulpore to Allahabad, as it is across the Ganges at that city the railway bridge will be made. It will also be under cover of the guns of the Fort. To carry a railway across this formidable river will cost a heavy sum, owing to its great width; although, I should say, the crossing of the Taptee, Nerbudda, and Mhye, from the great rise of these rivers in the monsoon, and their swift currents, was quite as difficult, if not more so. If the East Indian Railway in their first commencement could have organized a large foundry at Calcutta, and have cast their

own screw piles on the banks of the Hoogly, they might have had all their rivers bridged by this time, even up to Lahore. It is a perilous undertaking to construct railway bridges on the well-cylinder plan over such desolating rivers as the Jumna and Ganges. I read recently that one of these piers had given way. Col. Kennedy's screw-pile plan is quite as durable as the firmest brick pier, and has the advantage of leaving a freer course for the river to pass by. These rivers have no ice or driftwood, neither are their river boats so heavy as to endanger screw-pile bridges by fouling; for these special reasons the screw-pile system is admirably adapted for broad rivers with rapid currents, and where the soil is shifty and treacherous.

If Agra will not be frightened by sanatory doctors, and will use dry-brick-lined cesspools, with the S stench trap, every house and barrack in the place would be thoroughly free from nuisances and evil smells. Their pourous soil will absorb anything and everything in the shape of foul liquids and gases. Their nitrous soil would eat through cast-iron pipes in a month, therefore earthen pipes, even if unglazed, will do very well. Now 1,000 bricks will a little more than line a cesspool 5 feet deep by 3 feet wide; bring it up to within 9 inches of the surface, cover with strong dammered boards, and heap up with earth, and plant a bed of flowers over the spot, and I stake my word that the occupants of the house so provided shall use it without the necessity of cleansing it for ten years and without once experiencing the ghost of a smell. If a man tells me I must not use cesspools,—although I may poison my neighbours with a gutter of fever-filth, half over-grown with grass, behind my cook-room,—I can only say that I don't believe he knows what he is talking about.

Do the inhabitants of Agra know what a fund of amusement surrounds them in the shape of animals and grotesque figures, which can be picked out of a particularly leafy but bunchy growing tree common in that part of India? I first pointed it out to the dear family I lived with. The most striking resemblances of men's heads, animals, and a host of other things, were daily discovered. The gloom of the evening is the best time, when the back ground is not fully lighted up. In our compound we had, first, a jovial Paddy at Donnybrook Fair with his *caubeen* crushed in that peculiar shape which ill-used hats so readily assume; sometimes a rising star would fit into the very socket of his eye and give him a vicious look, which plainly said, "Will ye thred on my coat if ye plase?" Then we had the head of a clown who was splitting his sides with rich fun—a boy riding cockhorse on a walking stick—a jackal stealing his way into town with such a cautious, wary

step as would furnish a study for a painter—a jockey mounted on an English racer—a bullock with the strange medley of an Indian gipsy's traps—a cock standing on the summit flapping his wings, completed the picture. A hen may be seen running after either corn or chickens, like mad, on the right-hand side going to Futtehpore-Sikree; this figure is so perfect that no artist could give greater expression to it. Of Aldermanic faces there are scores; also camels, turkeys, peacocks, and khanasamah heads with turbans. Let my Agra friends walk on a moonlight night on the right outer paved walk from the Taj terrace (the sandal-wood tree walk I mean), keep the eyes to the left, and see the perfect human shaped head afforded by a tree on the other side of the fountain channel. The reader may not think my source of amusement of a very high order, but it was enough for me that the loving friends and their children I was with, found a fund of enjoyment and innocent pleasure in what I have described, and I most strongly recommend it to my Agra friends. As I am now about to take leave of that pleasant and healthy city, let me strongly advise those who require a change of air to a dry bracing climate, to go there in November and see the sights I saw, and he will thank me for the advice. To the man of wealth I emphatically say, take an architectural draughtsman with you, besides plenty of the materials with which our young home tourists copy old brasses in churches. These shall reap you such a harvest of artistic beauties from stone carvings and filligree work quite new to Western art, as shall gratify yourself, friends, and countrymen, and, when you have them engraved and published with letter-press explanatory notes from your learned pen, shall pay you for your toil and outlay a thousandfold.

TOM CRINGLE.

March 3rd, 1864.

AGRA TO DELHI.

No. XVIII.

After spending a most agreeable six weeks at Agra, one day I awoke to the fact, that no one could give me accurate information as to the time of departure of the half-monthly steamer down the Indus; and having a wholesome fear of overstaying my leave, I beat a hasty retreat, by leaving on the 4th Novem-

ber 1863. As it would take nearly as long to go back by the Agra Branch Railway (13½ miles) to the Toondla station on the main line, to reach Allyghur (48 miles), then the terminus of the East Indian line, I determined to go there by dak-gharry, so got away at 8 A.M., after a regretful parting from very dear friends.

The country on each side was bare of trees, and assumed an air of barren bleakness, but which would be obliterated in the rainy season, when the whole circle of land in view would be the promenade of CERES, laughing with nodding grain. I reached Allyghur, 53 miles by road, in nine hours. It had little to interest the traveller, except that grand landmark of civilization, a fine brick-built railway-station, which gave a rather imposing feature to the town. After waiting an hour, I started for Delhi (75 miles) at 6 P. M., the land on each side dotted over with patches of thick scrub jungle, and large excavated holes dug in searching for nitre. The country had thus an inexpressibly depressing effect, as the sun gradually went down, and daylight quickly vanished. I then rigged up my lamp and read up to the next station, where my servant Lalla got hot water for a brew of tea, which, with bread, cold fowl and ham, made a good dinner-supper. I have a strong suspicion that Lalla, this night, first acquired an enduring taste for ham ; and in his after-wanderings with me, he revelled in its collaterals, the forbidden bacon, and the tempting sausage of Cambridge.

Travelling is very comfortable in a good dak-gharry, 8 feet by 4 feet inside, where the traveller lays at full length, with his books and little comforts hung around and above in nets and pockets. Thus, with the excellently smooth kunker-made roads of Bengal and the North-West Provinces, his carriage rolls silently along, and favoured as I was with the bright silver moon to light up the way, it left nothing to be desired but a companion with whom to interchange thoughts whilst enjoying a good cigar in the cool hours of the evening. By day or night, the road and its wayfarers always afford subjects for thought, and are prolific in speculative ideas, some of them full of mournful sadness, when the eyes, directed far to the right, rest on the tangled jungle brakes on the banks of the mighty Ganges, in the midst of which our poor tender women and their dear children endured their weary travail through its tortuous paths, not knowing the moment they might be summoned to the court of death by bands of mutineers to whom pity was a stranger.

I presently came by the family of a well-to-do Mussulman, the females and children riding in curtained carts, each drawn by a pair of beautiful, sleek, grey bullocks, a breed

peculiar to the Punjaub. The bedding and cooking utensils are carried in the carts, whilst the younger sons and retainers walk armed by the side, to keep off intruders, and see that the cavalcade keeps well together. The patriarch of the family leads the van, staff in hand, dressed in the flowing robes of the East—his voluminous snowy turban partially covering a lofty brow, beneath which are deep, searching, black eyes, pent-housed over by bushy eye-brows; nose large and expressive, such as one sees among the Arabian Jews; mouth concealed by long grey mustachios, below which a full grey beard reaching midway to the cummerbund, or girdle. As I pass by, the children lift a corner of the curtain to peep under, whilst black eyes flash behind the netted windows of the cart-coverings, to glance—perhaps for the first time—at the white stranger. Thus on they go, at twelve or fifteen miles each day, at the end of which they will encamp under a shady grove of mango trees—the females within a circle of curtains carried for the purpose, whilst the sons and retainers keep watch and ward over the safety of the little camp, with an outlying piquet of the ever-watchful dogs of the household. Sometimes one of the little ones would be walking, and I would fish up a two-anna silver coin out of a bag, kept handy for *largesse* purposes, and hold it up and beckon the child to approach; but often instead of doing so, they would run off, screaming like mad; I throw the coin after them, and they scream the louder. I immediately know by the child's actions, that they come from a part of the country where Europeans are seldom seen, and that the child's ears have been poisoned by the elders with tales prejudicial to the white man. They are on a pilgrimage to some saint's shrine; peace go with them.

Anon, I hear the hurried notes from a bugle, which I know belongs to the mail cart; this passes swiftly by at a swinging gallop, and brings to the ready, *comparative* memory an excellent anecdote told by the Competition-Wallah, as to a mail-runner having been caught fast asleep, with his head comfortably reposing on the mail-bags. He was aroused by a rude kick, and asked if that was the proper way of expediting the transmission of Her Majesty's post bags? He replied in a tone of injured, oppressed innocence, that he was not the regular "tappal," but the express tappal! Then comes by a long string of the Government parcel transit carts, which travel so slow that you wonder why mankind cry out so against impatient people. Why, good reader, impatient people are the very salt of the earth in helping on the affairs of life. Only for impatient, hot-blooded men, we should have half

our work stagnate with sloth, like it does in the East. The Indian Carrying Company should get from England every clerk they can pick up, who may have failed there owing to having a hot fiery character, which valuable temperament, if expended on the natives who drive dak-gharries and parcel-carts, would be invaluable. God creates nothing in vain. I was once shipmate with an elder boy (I was of the mature age of twelve then), who, if beaten by the others in exercising top-gallant and royal yards, used to tear the shirt off his back from rage and vexation, often accompanied by bitter tears! I used to look up to this boy (John Legge) as the very target of emulation; and I now know that he had a most marked influence in making us boys highly emulative of each other in naval daring and smartness, which led the way to good seamanship and earnest work. So, good reader, always respect a high-spirited lad, bursting with impatience if he sees things going slow or wrong. He may be a *round* unit working in a *square* hole, pass this by, and respect his wonderful earnestness; it is always accompanied by a courage equal to anything that may turn up. These are the spirits who, when leading a squadron of dragoons, and coming on unexpected odds, give out the ringing cry "CHARGE" like the blast of a trumpet! There is no fear of his men hanging back, they can't—never do —when men of his stamp hail them forward. A soldier without this war-fire is only half a soldier; but the saddle is his throne of command, where hot onslaughts tally with his fiery and generous spirit—when the plunging leaps of his charger cause the sword to descend like blows from a sledge-hammer through chaps to chine. Good reader, with your kind permission, we will part company with this wild Pegasus as it unwittingly carries us away from our more sober road survey.

One cannot read long at night owing to the tremulous shaking of the carriage, so I put out the light and compose myself for sleep; but scarcely is this done when we arrive at the posting-station, generally a row of miserable thatched stables so low pitched that horses can barely enter them. After a deal of bawling to some Ramdeen to bring out the next turn, you hear a heavy, wearied tramp from a horse; so slow do the legs move that, as you catch sight of him by the light of the moon, you doubt whether his muscular action will not run down and stop, like a broken-springed watch, before he reaches the road where we pulled up. However, after what appears an age, he gets on to the road and is put in the shafts; when all is ready off we go —at a very slow walk! Then is unveiled the unmerciful native character—men who should here exercise that patience which is

their particular characteristic when *they* are set to work. But no; forgetting that the poor old horse was probably once the pride of a regiment, when his unfeeling driver was a child, and that his joints are now so stiff from bitter hard work, scanty food, no bedding to lie on, with scarce an attempt to groom him, that to trot is an utter impossibility till his old joints and muscles warm up; unmindful of these humane considerations, the driver rains on him a shower of blows with a heavy thong-whip until I, in mercy, stop him, get out, reassure the poor old charger by giving him a piece of my stale loaf, to induce him to feel that he has still one chance friend left in the world, then walk by his side for ten minutes or so, when I would chirrup him off into a trot at once, and when once started, this class of horse (having good breeding in them, or they would have gone to the dogs long before) gradually get into a full swinging trot, which is maintained to the end of the stage. We will suppose us arrived there. Again is the change called out, and after the usual delay, a quick impatient tramp is heard, and you catch sight of a young, really sound, good-looking horse. A stranger to Indian travel would extol his good fortune in getting such an animal, which he knows is sure to go well! We shall see. The old charger is taken out, and I make a fellow lead him up and down the road, so that his hot quivering muscles may gradually cool down, and thus not stiffen as when allowed to go at once to his stable. An observant listener may hear a long and animated discussion between the driver and grooms as to the expediency of putting-to the fine-looking horse. It generally ends in the driver being bullied into anything the grooms decide, not but what the driver's authority should at once end the discussion, but simply because with natives of this stamp all are masters, and, as in this debate, they out-vote him in tongue, he succumbs with a sigh, the promising nag is put to, and I am humbly asked to bid adieu to the old charger by taking my seat. As I do so, I notice that every hand is impressed to lay hold of the spokes of the wheels; the word off is given, which our fine horse obeys by sitting on the ground like Mr. Briggs's Circus nag as shown in *Punch*. Then come down blows by the dozen from two or three operators, but our case-hardened nag pays little regard to them; yet presently they get too warm for even his hardened hide, and he gets on his four legs again, so that he may use the hind pair in demolishing the shafts of the gharry. This he knows from hard-won experience will cause his tormentors to cease hostilities, for a time at least. I now get out to see how they intend next to proceed. A fight

of a rope is put around one of the fore fetlocks, and at a given signal, the men at the wheels push on the carriage, the driver on the box applies his heavy whip, the man with the rope round the fetlock pulls the leg straight out to the front, as if zealously bent on teaching him the first rudimentary part of the goose-step, and all shout like mad! But our horse only leans back and gives wicked, dissenting shakes of the head, which reveal oceans of former wrongs from man. We all now have a rest; I have a cigar, and the natives light their birries, whilst the poor horse stands by with his back highly arched, ready to resist any sudden attack, yet humbly enjoying his victory. At last, knowing that animals often act from habit, but only in certain localities, I took the horse out and got the gharry run on a hundred yards or so, then put him to again, and off he went at the first chirrup. I once saw a horse behave even worse than I have described, and the men had given up the notion of starting him, as a bad job, when out jumps a clever fellow from a hut close by, who scolded, in mock terms, those who had been beating the horse, patted and soothed him, called him by every endearing name he could think of—he was a prince's son! nay, a rajah! a bahadpor, everything that was great and good, then gave the word "chall" (go)—off he went, and did his 7-mile stage at a gallop all the way!

What comes along next? A Rajah with a long train of followers, the ladies of his harem shut up in bullock-carts, screened from the heat and public gaze by thickly-padded red cotton curtains with little network windows six inches square to peep through at passing events on the road. On either side rode horsemen, lean and lithsome as the steeds they bestrode, but from whom good service could be got, unless opposed to European cavalry, whom they have never yet withstood in warfare. Tatterdemallion footmen, armed with spear, sword, and buckler, bring up the rear; all are covered with dust, and on they go. We had passed the tents ready pitched in a cool shady grove three miles back. Then came screaming by, like equine tigers, horses bred in the valley of the Beas river; each is led by two men who are on the look-out for a biting charge from these brutes, who prance along neighing and screaming nearly without cessation, their ears laid back "on wicked thoughts intent." These are fine, lusty showy animals, which the Hindoo poet and romancer always depicts his gods and heroes mounted on. A great deal of their vice will disappear under training, after which they will be fed like "stalled oxen," and wax so fat that their riders can only take a short spurt out of them to find their wind gone. Yet the famous

old 17th Light Dragoons, who were in India from 1808 till 1824, and who won such laurels in putting down the Pindarries in LAKE and WELLESLEY'S time, were nearly exclusively mounted on Kattiawar horses, which are so closely allied in breed to those of the Beas, that I cannot tell the difference; they are bold chargers with good riders on their backs. The great Trunk Road of the Valley of the Ganges is so thronged with a passing panoramic stream of strange sights that a traveller might fill a book with descriptions of them, and yet not do justice to them. On, on we go, and at daylight next morning, the busy throng on the road indicated our approach to the great Mahomedan capital of Delhi, where I arrived at 9 A. M. on the 5th November, first passing over the bridge of boats across the Jumna, but which has since been replaced by a railway bridge with side paths for foot passengers. After a hurried bath and breakfast, I hired a horse and buggy to go out and look about.

TOM CRINGLE.

March 8th, 1864.

DELHI.

No. XIX.

Delhi at this time showed that the heavy hand of retribution had been laid on her streets and palaces. All those little domestic signs and traces which reveal man's daily habitation had been rudely torn away. The hall of justice had become a barrack, and the dewan-khas had been transformed into a museum. "He that liveth by the sword shall die by the sword," has been verified in the downfall of this wicked race of princes, who, with all their magnificent pomp of royalty, knew not how to be just. Every coin wrung from the hand of the tiller of the soil was brought into the cities to be lavished on a court, who, knowing not the holiness of labour, wallowed in a style of hideous licentiousness, until by foul deeds and heinous offences, they met the doubly-merited doom of extinction. When Aurungzebe was lavishing his riches on trifling folly, what would have been his thoughts could a prophet of the future have lifted the veil and showed him the English, from an obscure island, building a bridge close to his city over the mighty Jumna across which the locomotive, great civilizer of this age, was to pass? These royal

robber spendthrifts have scarcely left one bridge, market, public bath, garden, theatre, college, or school, erected for the use of their subjects. All is built for personal display and royal luxury. Verily they have their reward!

The Royal Gardens of Shalimar is the most pleasant spot I saw near Delhi—they are situated about four and a half miles west of the city, and were laid out by Jehan Guire, at first named Selim, son of Acbar, who expended ten lakhs of rupees (£100,000) on them. There are magnificent pavilions, pleasure-houses, baths, canals, and fountains stocked with gold fish, together with every luxury which gold could command, or which could conduce to a king's luxury and privacy. These are still kept in good order. But I was disappointed with the appearance of the Cashmere Gate, which is small, mean and low. The arch of the right gateway, as you leave the town, still bears the marks of the exploded powder bags laid by the gallant Salkeld and his heroic companions—for though this gate had not the altitude and massive solidity of the Bombay Fort-gates before they were demolished, yet the approach to the Cashmere Gate was quite as much under fire—and to be on the spot and survey the scene one cannot but ask, what were the enemy's marksmen about to let any one show himself and live!

I was much surprised to find Hindoo Rao's house a mile from the city walls on a hill not less than 80 feet high. I saw many marks of cannon shot about the old batteries on the crest of the hill, but it is by no means the exposed place I had imagined it to be. The side facing the city is rather precipitous, and the trees, which line the many roads leading citywards, were so thick that I could not see the fort walls for them. Many places struck by our cannon balls, on each side the Cashmere Gate, were scarcely indented, so feeble had the impact of the shot been. I saw the foundation laid in, on which to build a monument to those who fell at Delhi. It is on the same hill range on which Hindoo Rao's house is situated, and when finished it will have a commanding effect, as seen from the city.

Being in haste to get on, I had only just time to visit the Kotub Minar, and gain the following details respecting it. The Minar is 48 feet 4 inches diameter at the base, and when measured in 1794 was 242 feet in height. Even then, however, the capital was ruined, so that some ten, or perhaps twenty, feet must be added to this to complete its original elevation. It is ornamented by four bold projecting balconies: one at 90, the second at 140, the third at 180, and the fourth at 203 feet from the ground, between which are richly-sculptured raised belts con-

taining inscriptions. In the lower story the projecting flutes are alternately angular and circular, in the second circular, and in the third angular only; above this the Minar is plain, but principally of white marble, with belts of which the red sandstone of the three lower stories are composed.

The only building known to be taller than this, that Mahomedans ever erected, is the minaret of the Mosque of Hussan, at Cairo; but as this pillar at old Delhi is a wholly independent building, it has a far nobler appearance, and both in design and finish far surpasses its Egyptian rival, as indeed it does any building of its class, so far as I know, in the whole world.

At the distance of 470 feet north of this one a second Minar was commenced of twice its dimensions, or 297 feet in circumference. It was only carried up to the height of 40 feet, and abandoned, probably in consequence of the removal of the seat of Government to Tuglukabad, or elsewhere.

The Jumma Musjid of Delhi is certainly a splendid building occupying a magnificent raised site, but it cannot compete for a moment with the gorgeous buildings built by Acbar and Shah Jehan in the neighbourhood of Agra. The Jumma Musjid was the only building in Delhi which impressed me with ideas of spacious and lofty grandeur. But the Court, in which is enshrined the mausoleum of Selim Sheik Chisti, at Futtehpore-Sikree, by far excels it, both in space and magnificence. The following description of the Jumma Musjid is taken from the work on Delhi, by Mr. Frederick Cooper, Bengal Civil Service:—

"Near the centre of the city, and about two furlongs from the Delhi gate of the palace, stands the Jumma Musjid,* or great mosque, which in size and beauty corresponds with the magnificence of Delhi in the time of its founder. It is built on a rocky eminence, called the Jujula Pahar, the surface of which was levelled to form the site, which being higher than the surrounding houses, the mosque can be seen at a considerable distance on every side of the city. It has three entrances

* The view from the summit of one of the minarets of the Jumma Musjid, embraces an amphitheatre of historic relics of unsurpassed extent. On a clear day may be discerned the Kootub minar, Poorana killa, Humaioon's tomb, Sufdir Jung's Mausoleum, with other domes and cupolas dotting the plains; and as the eye falls on the now famous heights passing from the Junter Munter and the great square of the Edgah, there become visible Hindoo Rao's house, the Observatory, the Mosque picquet and the Flag Staff tower of glorious and tragic memorial. The whole interior of the Palace, the Meerut side of the Jumna, and the ruins of Feyozabad are also embraced in the panorama, in the distance of which there is a wilderness of monuments belonging to different ages. The great mosque is considered the most complete specimen of the Mogul type of architecture, which was carried to such unrivalled perfection by Shah Jehan. If it lacks the austere magnificence and rugged profusion of ornament of the old Pathans, it compensates for these in presenting a model of symmetry and elegance allowing of a variety of graceful outlines hardly equalled by any other structure.

by handsome gateways of red sandstone, which are approached by magnificent flights of steps of the same material. The principal gateway is on the east side, and is much larger and handsomer than those on the north and south; they all lead into a large quadrangle paved with fine large sandstone flags, in the centre of which is a marble reservoir of water, in which the Mussulmans make the ablutions required by their creed before performing their devotions. The necessary supply of water is drawn by a Persian wheel, turned by bullocks, from a deep well, cut at great expense out of the solid rock in one corner of the building, and is thrown into the reservoir through a fountain-pipe in the centre. On the west side of the square stands the mosque itself, which is of an oblong form, 201 feet in length and 120 feet broad, and surmounted by three superb cupolas of white marble, crowned with cullisses or spires of copper, richly gilt. The front of the building is partly faced with white marble, and along the cornice are ten compartments, each 4 feet long and 2½ feet broad, which are inlaid with black marble inscriptions in the Niski character, and are said to contain the whole of the Koran, but they really give an account of the expenditure, &c. in building the mosque. The interior is paved throughout with slabs of white marble, 3 feet long and 1½ broad, each decorated with a black border, which gives it an extremely beautiful appearance. Part of the inner walls is also faced with plain white marble. Near the Kibla, or that part which indicates the direction of the city of Mecca, is a handsome taq, or niche, adorned with a profusion of rich frieze work, and though joined in several places, appears to have been cut out of a solid block of white marble, four feet high and six in length.

"The Mosque is flanked by two minarets 130 feet high, composed of white marble and red stone placed vertically in alternate stripes, and access is obtained to the top of them by flights of narrow steps of red stone in the interior; at about equal distances there are three projecting galleries, and they are crowned with light pavilions of white marble.

"Three sides of the terrace on which this magnificent edifice stands, are enclosed by a colonnade of red sandstone, and each corner is ornamented by octagonal pavilions of white marble, the supporting columns being of red stone. In the quadrangle at the north-east and south-east angles are low pillars, on the top of which are fixed marble slabs, on one of which is engraved the eastern hemisphere, on the other there are marked certain hour lines: each has an upright iron spike or gnomon, and the shadow shown by the sun indicates to the Faithful the time of prayer. No native, whether Hindoo or Mahomedan, dare venture to enter the quadrangle without taking off his shoes; but Europeans are not required to show this Oriental mark of respect to the temple of the prophet of Islamism.

"Every part of the Mosque is accessible to the visitor except that portion of the square in the north-west angle, which is partitioned off

by a beautifully-carved white marble screen, beyond which are several rooms, in which are deposited some relics, said to be some hair, a cloak, and a pair of slippers of the Prophet, some hair of Ali, Hoosein and Hasun, certain chapters of the Koran written by Ali, Hoosein and Hasun, impressions of the prophet's foot on stone, and some others of minor importance. *

"This splendid pile was begun by the Emperor Shah Jehan, in the fourth, and finished in the tenth year of his reign, and cost the princely sum of ten lacs of rupees, or £100,000, and a similar building could not be erected in England for four times the amount."

I always had a feeling of shame steal over me, when I noticed any of our modern buildings in course of erection near such places as Agra, Futtehpore-Sikree, Secundra, or Delhi. The spoilers of the world who beautified these cities—robbers though they were—knew how to build, so that posterity should admire the durability and grandeur of their works; whereas we, learned in the classic schools of Greece and Rome, who can execute good and durable work in our own country, yet build here in fear that the first monsoon rain will topple our work down. Let us hope, however, that the new buildings designed for Bombay by the architects now amongst us will initiate a new era in this beautiful art, and cause the present governorship of Sir Bartle Frere to be hailed as the Augustan age of the capital of Western India.

There are good comfortable hotels in Delhi, where the famous Delhi enamel painters bring their choicest work to tempt the rupees from the pockets of travellers.

Delhi was first conquered by the Mahomedans from the Rajpoot Rajah, Chawand Ray, who after fighting a bloody battle on the banks of the Jumna, which he lost, retired within his walls, and endured a long siege, but was forced to surrender in A. D. 1193. As many of my readers will probably be interested, as I was myself, in a description of Delhi in Aureng-Zebe's time, I have taken the following extract from M. Bernier's work on the subject. M. Bernier landed in India in the year 1655; became Physician to the King of Delhi in 1658; and left India in 1670. The work from which the extract is taken was written some eighteen years afterwards.

"THE COURT OF DELHI IN AURENG-ZEBE'S TIME.

"The entrance of the fortress presents nothing remarkable besides two large elephants of stone placed at either side of one of the prin-

* These were all taken away but restored by one of the Faithful into whose hands they had fallen. The slippers, the hair, and the sacred manuscripts, are still to be seen.

cipal gates. On one of the elephants is seated the statue of Jemel, the renowned rajah of Chitore; on the other is the statue of Polta, his brother. These are the brave heroes who, with their still braver mother, immortalized their names by the extraordinary resistance which they opposed to the celebrated Acbar; who defended the towns besieged by that great emperor with unshaken resolution; and who at length reduced to extremity, devoted themselves to their country, and chose rather to perish with their mother in sallies against the enemy than submit to an insolent invader. It is owing to this extraordinary devotion on their part, that their enemies have thought them deserving of the statues here erected to their memory. These two large elephants, mounted by the two heroes, have an air of grandeur, and inspire me with an awe and respect which I cannot describe.

"After passing into the citadel through this gate, there is seen a long and spacious street, divided in the midst by a canal of running water. The street has a long divan, or raised way, on both sides, in the manner of the Pont-neuf, five or six French feet high and four broad. Bordering the divan are closed arcades, which run up the whole way in the form of gates. It is upon this long divan that all the controllers and other petty officers exercise their functions without being incommoded by the horses and people that pass in the street below. The mansebdars or inferior omrahs mount guard on this raised way during the night. The water of the canal runs into the seraglio, divides and intersects every part, and then falls into the ditches of the fortification. This water is brought from the river Jumna by means of a canal opened at a distance of five or six leagues above Delhi, and cut with great labour through fields and rocky ground.

"The other principal gate of the fortress also conducts to a long and tolerably wide street, which has a divan on both sides bordered by shops instead of arcades. Properly speaking, this street is a bazaar, rendered very convenient in the summer and the rainy season by the long and capacious arched roof with which it is covered. Air and light are intromitted by several large and round apertures in the roof.

"Besides these two streets, the citadel contains many smaller ones, both to the right and to the left, leading to the quarters where the omrahs mount guard, during four and twenty hours, in regular rotation, once a week. The places where this duty is performed may be called splendid, the omrahs making it a point to adorn them at their own expense. In general they are spacious divans or alcoves facing a flower garden, embellished by small canals of running water, reservoirs and jets d'eau. The omrahs on guard have their table supplied by the king. Every meal is sent ready dressed, and is received by the omrahs with all suitable ceremony, three times performing the taslim or salute of grateful acknowledgment, by turning the face toward the king's residence, and then raising the hand to the head and lowering it to the ground.

" There are besides, many divans and tents in different parts of the fortress, which serve as offices for public business.

" Large halls are seen in many places, called kar-khanas or work-shops for the artisans. In one hall embroiderers are busily employed, superintended by a master. In another you see the goldsmiths ; in a third, painters ; in a fourth, varnishers in lacquer ; in a fifth, joiners, turners, tailors and shoemakers ; in a sixth, manufacturers of silk brocade and those fine muslins of which are made turbans, girdles with golden flowers, and drawers worn by females, so delicately fine as frequently to wear out in one night. This article of dress, which lasts only a few hours, may cost ten or twelve crowns, and even more, when beautifully embroidered with needle-work.

" The artisans repair every morning to their respective kar-khanas, where they remain employed the whole day ; and in the evening return to their homes. In this quiet and regular manner their time glides away ; no one aspiring after any improvement in the condition of life wherein he happens to be born. The embroiderer brings up his son as an embroiderer, the son of a goldsmith becomes a goldsmith, and a physician of the city educates his son for a physician.* No one marries but in his own trade or profession ; and this custom is observed almost as rigidly by Mussulmans as by the Hindoos, to whom it is expressly enjoined by their law. Many are the beautiful girls thus doomed to live singly, girls who might marry advantageously if their parents would connect them with a family less noble than their own.

" I must not forget the am-kas, to which you at length arrive after passing the palaces just mentioned. This is really a noble edifice : it consists of a large square court of arcades, not unlike our Place Royale, with this difference, however, that the arcades of the am-kas have no buildings over them. Each arcade is separated by a wall, yet in such a manner that there is a small door to pass from one to the other. Over the grand gate, situated in the middle of one side of this court, is a capacious divan, quite open on the side of the court, called nagar-khana. In this place, which thence derives its name, are kept the trumpets, or rather the hautboys and tymbals, which play in concert at certain hours of the day and night. To the ears of an European recently arrived this music sounds very strangely, for there are ten or twelve hautboys, and as many tymbals, which play together. One of the hautboys, called karna, is a fathom and a half in length, and its lower aperture cannot be less than a French foot. The tymbals of brass or iron are some of them at least a fathom in diameter. You may judge, therefore, of the roaring sound which issues from the nagar-khana. On my first arrival

* Many of the fences which marked the limits of the respective castes are now broken down. The Bramins of the Deccan and Punjab, observes Mr. Forster, have taken up the sword, and are seen crowding the ranks of an army ; the chehteree occasionally takes himself to traffic, and the sooder has become the inheritor of principalities.—*Translator.*

it stunned me so as to be insupportable: but such is the power of habit that this same noise is now heard by me with pleasure; in the night, particularly, when in bed and afar, on my terrace this music sounds in my ears as solemn, grand, and melodious. This is not altogether to be wondered at, since it is played by persons instructed from infancy in the rules of melody, and possessing the skill of modulating and turning the harsh sounds of the hautboy and tymbal so as to produce a symphony far from disagreeable when heard at a certain distance. The nagar-khana is placed in an elevated situation, and remote from the royal apartments, that the king may not be annoyed by the proximity of this music.

"Opposite to the grand gate; which supports the nagar-khana, as you cross the court, is a large and magnificent hall, decorated with several rows of pillars, which, as well as the ceiling, are all painted and overlaid with gold. The hall is raised considerably from the ground and very airy, being open on the three sides that look into the court. In the centre of the wall that separates the hall from the seraglio, and higher from the floor than a man can reach, is a wide and lofty opening, or large window, where the monarch every day, about noon, sits upon his throne, with some of his sons at his right and left; while eunuchs standing about the royal person, flap away the flies with peacocks' tails, agitate the air with large fans, or wait with undivided attention and profound humility to perform the different services allotted to each. Immediately under the throne is a divan, surrounded by silver rails, on which are assembled the whole body of omrahs, the rajahs, and the ambassadors, all standing, their eyes bent downward, and their hands crossed. At a greater distance from the throne are the mansebdars or inferior omrahs, also standing in the same posture of profound reverence. The remainder of the spacious room, and indeed the whole court-yard, are filled with persons of all ranks, high and low, rich and poor; because it is in this extensive hall that the king gives audience indiscriminately to all his subjects: hence it is called am-kas, or audience-chamber of high and low.

"During the hour and a half or two hours that this ceremony continues, a certain number of the royal horses pass before the throne, that the king may see whether they are well used and in a proper condition. The elephants come next, their filthy hides having been well washed and painted as black as ink, with two large red steaks from the top of the head down to the trunk where they meet. The elephants are covered with embroidered cloth; a couple of silver bells are suspended to the two ends of a massive silver chain placed over their back; and white cow-tails from Great Thibet, of great value, hang from the ears like immense whiskers. Two small elephants, superbly caparisoned, walk close to these colossal creatures, like slaves appointed to their service. As if proud of his gorgeous attire and of the magnificence that surrounds him, every elephant moves with a

solemn and dignified step; and when in front of the throne the driver who is seated on his shoulder, pricks him with a pointed iron, animates and speaks to him, until the animal bends one knee, lifts his trunk on high and roars aloud, which the people consider as the elephant's mode of performing the taslim or usual reverence.

"Other animals are next introduced;—tame antelopes, kept for the purpose of fighting with each other; nilgaus, or grey oxen, that appear to me to be a species of elk; rhinoceroses; large Bengal buffaloes with prodigious horns which enable them to contend against lions or tigers; tame leopards, or panthers, employed in hunting antelopes; some of the fine sporting dogs from Usbec of every kind, and each dog with a small red covering; lastly, every species of the birds of prey used in field sports for catching partridges, cranes, hares, and even, it is said, for hunting antelopes, on whom they pounce with violence, beating their heads and blinding them with their wings and claws.

"Besides this procession of animals, the cavalry of one or two omrahs frequently pass in review before the king; the horsemen being better dressed than usual, the horses furnished with iron armour, and decorated with an endless variety of fantastic trappings.

"The king takes pleasure also in having the blades of cutlasses tried on dead sheep, brought before him without the entrails, and neatly bound up. Young omrahs, mansebdars and gourzeberdars or mace-bearers exercise their skill, and put forth all their strength, to cut through the four feet, which are fastened together, and the body of the sheep at one blow.

"But all these things are so many interludes to more serious matters. The king not only reviews his cavalry with peculiar attention, but there is not, since the war has been ended, a single cavalier or other soldier whom he has not inspected, and made himself personally acquainted with, increasing or reducing the pay of some, and dismissing others from the service. All the petitions held up in the crowd assembled in the am-kas, are brought to the king and read in his hearing; and the persons concerned being ordered to approach are examined by the monarch himself, who often redresses at the instant the wrongs of the aggrieved party. On another day of the week he devotes two hours to hear in private the petitions of ten persons, selected from the lower orders, and presented to the king by a good and rich old man. Nor does he fail to attend the justice chamber, called adalet-khana, on another day of the week, attended by the two principal cadis, or chief justices. It is evident, therefore, that barbarous as we are apt to consider the sovereigns of Asia, they are not always unmindful of the justice that is due to their subjects.

"What I have stated of the proceedings in the assembly of the am-kas appears sufficiently rational and even noble; but I must not conceal from you the base and disgusting adulation which is invariably wit-

nessed there. Whenever a word escapes the lips of the king, if at all to the purpose, how trifling soever may be its import, it is immediately caught by the surrounding throng; and the chief omrahs, extending their arms towards heaven, as if to receive some benediction, exclaim karamat! karamat! wonderful! wonderful! he has spoken wonders! Indeed there is no Mogul who does not know and does not glory, in repeating this proverb in Persian verse:

Aguer chah ronzra gou yed cheb est in
Bubayed gouft inck mah ou peruin.

If at noon day the king asserts that it is midnight, you are to say, behold the moon and the stars.

"The vice of flattery pervades all ranks. When a Mogul, for instance, has occasion for my services he comes to tell me by way of preamble, and as matter of course, that I am the Aristotalis the Bocrate, and the Abouysina ulzaman; the Aristotle, the Hippocrates, and the Avicenna of the age. At first I endeavoured to prevent this fulsome mode of address by assuring my visitors that I was very far from possessing the merit they seemed to imagine, and that no comparison ought to be made between such great men and me; but finding that my modesty only increased their praise, I determined to accustom my ears to their flattery as I had done to their music. I shall here relate an anecdote which I consider quite characteristic. A Pundit Brahmin or Hindoo doctor, whom I introduced into my Aga's service, would fain pronounce his panegyric; and after comparing him to the greatest conquerors the world has ever known, and making for the purpose of flattery a hundred nauseous and impertinent observations, he concluded his harangue in these words, uttered with all conceivable seriousness; 'When my lord, you place your foot in the stirrup, marching at the head of your cavalry, the earth trembles under your footsteps; the eight elephants, on whose heads it is borne, finding it impossible to support the extraordinary pressure.' The conclusion of this speech produced the effect that might be expected. I could not avoid laughing, but I endeavoured, with a grave countenance, to tell my Aga, whose risibility was just as much excited, that it behoved him to be cautious how he mounted on horseback and created earthquakes, which often caused so much mischief. 'Yes, my friend,' he answered without hesitation, 'and that is the reason why I generally choose to be carried in a palanquin.'

"The grand hall of the am-kas opens into a more retired chamber, called the gosel-khana, or the place to wash in. Few persons are permitted to enter this room, the court of which is not so large as that of the am-kas. The hall is, however, very handsome, spacious, gilt and painted, and raised four or five French feet from the pavement, like a large estrade. It is in this place that the king, seated in a chair, his omrahs standing around him, grants more private audiences to his officers, receives their reports, and deliberates on important

affairs of state. Every omrah incurs the same pecuniary penalty for omitting to attend this assembly in the evening as for failing to be present at the am-kas in the morning. The only grandee whose daily attendance is dispensed with is my Aga Danechmend-Khan, who enjoys this exemption in consequence of his being a man of letters, and of the time he necessarily devotes to his studies or to foreign affairs ; but on Wednesdays, the day of the week on which he mounts guard, he attends in the same manner as other omrahs. This custom of meeting twice a day is very ancient ; and no omrah can reasonably complain that it is binding, since the king seems to consider it as obligatory upon himself as upon his courtiers to be present ; nothing but urgent business, or serious bodily affliction, preventing him from appearing at the two assemblies. In his late alarming illness Aureng-Zebe was carried every day to the one or the other, if not to both. He felt the necessity of showing himself at least once during the twenty-four hours ; for his disorder was of so dangerous a character that his absence, though only for one day, might have thrown the whole kingdom into trouble and insurrection and caused the closing of every shop.

" Although the king, when seated in the hall of gosel-khana, is engaged about such affairs as I have mentioned, yet the same shows are exhibited for the most part as in the am-kas ; but being late in the day, and the adjoining court being small, the cavalry of the omrahs does not pass in review. There is this peculiar ceremony in the evening assembly, that all the mansebdars who are on guard pass before the king to salute him with much form. The kours move pomposly in their front : these are silver figures, beautifully made, carried at the end of large silver sticks : two of them represent large fish ; two others, a horrible and fantastic animal called eiedeha ; others are the figures of two lions ; others of two hands ; and others of scales ; and several more which I cannot here enumerate, to which the Indians attach a certain mystic meaning. Among the kours and the mansebdars, are mixed many gourze-berdars, or macebearers, chosen for their tall and handsome persons, and whose business it is to preserve order in assemblies, and to carry the king's orders, and execute his commands with the utmost speed.

" It would afford me pleasure to conduct you to the seraglio, as I have introduced you into other parts of the fortress. But who is the traveller that can describe from ocular observation the interior of that building ? I have sometimes gone into it when the king was absent from Delhi, and once pretty far I thought, for the purpose of giving my professional advice in the case of a great lady so extremely ill that she could not be moved to the outward gate, according to the custom observed upon similar occasions ; but a kashmire shawl covered my head, hanging like a large scarf down to my feet, and an eunuch, led me by the hand, as if I had been a blind man. You must be content, therefore, with such a general description as I have received from

some of the eunuchs. They inform me that the seraglio contains beautiful apartments, separated, and more or less spacious and splendid, according to the rank and income of the females. Nearly every chamber has its reservoir of running water at the door; on every side are gardens, delightful alleys, shady retreats, streams, jets d'eau, grottoes, deep excavations that afford shelter from the sun by day, lofty divans and terraces, on which to sleep coolly at night. Within the walls of this enchanting place, in fine, no oppressive or inconvenient heat is felt. The eunuchs speak with extravagant praise of a small tower, facing the river, which is covered with plates of gold, in the same manner as the two towers of Agra; and its apartments are decorated with gold and azure, exquisite paintings, and magnificent mirrors. Before taking our final leave of the fortress, I wish to recall your attention to the amkas, which I am desirous to describe, as I saw it during certain annual festivals; especially on the occasion of the rejoicings that took place after the termination of the war. Never did I witness a more extraordinary scene.

"The king appeared seated upon his throne, at the end of the great hall, in the most magnificent attire. His vest was of white and delicately flowered satin, with a silk and gold embroidery of the finest texture. The turban, of gold cloth, had an aigrette whose foot was composed of diamonds of an extraordinary size and value, besides an oriental topaz, which may be pronounced unparalleled, exhibiting a lustre like the sun. A necklace of immense pearls, suspended from his neck, reached to the stomach, in the same manner as many pagans wear their strings of beads. The throne was supported by six massive feet, said to be of solid gold, sprinkled over with rubies, emeralds, and diamonds. I cannot tell you with accuracy the number or value of this vast collection of precious stones, because no person may approach sufficiently near to reckon them, or judge of their water and clearness; but I can assure you that there is a confusion of diamonds, as well as other jewels, and that the throne, to the best of my recollection, is valued at four crores of rupees. I observed elsewhere that a lakh is one hundred thousand rupees, and that a crore is a hundred lakhs; so that the throne is estimated at forty millions of rupees. It was constructed by Shah Jehan, the father of Aureng-Zebe, for the purpose of displaying the immense quantity of precious stones accumulated successively in the treasury from the spoils of ancient Rajahs and Patans, and the annual presents to the monarch which every omrah is bound to make on certain festivals. The construction and workmanship of the throne are not correspondent with the materials; but two peacocks, covered with jewels and pearls, are well conceived and executed. They were made by a workman of astonishing powers, a Frenchman by birth, who after defrauding several of the princes of Europe, by means of false gems, which he fabricated with peculiar skill, sought refuge in the Great Mogul's court where he made his fortune. At the foot of the throne were assembled all the omrahs, in splendid apparel, upon an estrade

surrounded by a silver railing and covered by a spacious canopy of brocade with deep fringes of gold. The pillars of the hall were hung with brocades of a gold ground, and flowered satin; canopies were raised over the whole expanse of the extensive apartment fastened with red silken cords, from which were suspended large tassels of silk and gold. The floor was covered entirely with carpets of the richest silk, of immense length and breadth. A tent, called the aspek, was pitched outside, larger than the hall, to which it joined by the top. It spread over half the court, and was completely enclosed by a great balustrade covered with plates of silver. Its supporters were pillars overlaid with silver, three of which were as thick and as high as the mast of a bark, the others smaller. The outside of this magnificent tent was red, and the inside lined with elegant Masulipatam chintzes, figured expressly for that very purpose with flowers so natural and colours so vivid, that the tent seemed to be encompassed with real parterres.

"As to the arcade galleries round the court, every omrah had received orders to decorate one of them at his own expense, and there appeared a spirit of emulation who should best acquit himself to the monarch's satisfaction. Consequently all the arcades and galleries were covered from top to bottom with brocade, and the pavement with rich carpets.

"On the third day of the festival, the king, and after him several omrahs, were weighed with a great deal of ceremony in large scales, which, as well as the weights, are, they say, of solid gold. I recollect that all the courtiers expressed much joy when it was found that Aureng-Zebe weighed two pounds more than the year preceding.

"Similar festivals are held every year, but never before were they celebrated with equal splendour and expense. It is thought that the principal inducement with the king for the extraordinary magnificence displayed on this occasion was to afford to the merchants an opportunity of disposing of the quantities of brocades, which the war had for four or five years prevented them from selling. The expense incurred by the omrahs was considerable, but a portion of it fell ultimately on the common cavaliers, whom the omrahs obliged to purchase the brocades to be made up into vests.

"An ancient custom attends these anniversary days of rejoicing, not at all agreeable to the omrahs. They are expected to make a handsome present to the king, more or less valuable according to the amount of their pay. Some of them, indeed, take that opportunity of presenting gifts of extraordinary magnificence, sometimes for the sake of an ostentatious display, sometimes to divert the king from instituting an enquiry into the exactions committed in their official situations or governments, and sometimes to

gain the favour of the king, and by that means obtain an increase of salary. Some present fine pearls, diamonds, emeralds or rubies; others offer vessels of gold set with precious stones; others again give a quantity of gold coins, each worth about a pistole and a half. During a festival of this kind Aureng-Zebe having paid a visit to Jafer-khan, not as his vizier, but as a kinsman, on the pretext that he wished to see a house which he lately erected, the vizier made a present to the king of gold coins to the amount of one hundred thousand crowns, some handsome pearls, and a ruby, which was estimated at forty thousand crowns, but which Shah Jehan, who understood better than any man the value of every kind of precious stone, discovered to be worth less than five hundred, to the great confusion of the principal jewellers, who, in this instance, had been completely deceived.

"A whimsical kind of fair is sometimes held during these festivities in the mahil, or royal seraglio: it is conducted by the handsomest and most engaging of the wives of the omrahs and principal mansebdars. The articles exhibited are beautiful brocades, rich embroideries of the newest fashion, turbans elegantly worked on cloth of gold, fine muslins worn by women of quality, and other articles of high price. These bewitching females act the part of traders, while the purchasers are the king, the begums or princesses, and other distinguished ladies of the seraglio. If any omrah's wife happens to have a handsome daughter, she never fails to accompany her mother, that she may be seen by the king and become known to the begums. The charm of this fair is the most ludicrous manner in which the king makes his bargains, frequently disputing for the value of a penny. He pretends that the good lady cannot possibly be in earnest, that the article is much too dear, that it is not equal to what he can find elsewhere, and that positively he will give no more than such a price. The woman, on the other hand, endeavours to sell to the best advantage, and when the king perseveres in offering what she considers too little money, high words frequently ensue, and she fearlessly tells him that he is a mere merchant of snow, a person ignorant of the value of merchandize; that her articles are too good for him, and that he had better go where he can suit himself better. The begums betray, if possible, a still greater anxiety to be served cheaply; high words are heard on every side, and the loud and scurrilous quarrels of the sellers and buyers create a complete farce. But sooner or later they agree upon the price, the princesses as well as the king buy right and left, pay in ready money, and often slip out of their hands, as if by accident, a few gold instead of silver rupees, intended as a compliment to the fair merchant or her pretty daughter. The present is received in the same unconscious manner, and the whole ends amidst witty jests and good humour.

"The festivals generally conclude with an amusement unknown in Europe—a combat between two elephants; which takes place in the

presence of all the people on the sandy space near the river: the king, the principal ladies of the court and the omrahs, viewing the spectacle from different apartments in the fortress.

"A wall of earth is raised three or four French feet wide and five or six high. The two ponderous beasts meet one another face to face, on opposite sides of the wall, each having a couple of riders, that the place of the man who sits on the shoulders for the purpose of guiding the elephant with a large iron hook, may immediately be supplied if he should be thrown down. The riders animate the elephants either by soothing words, or by chiding them as cowards, and urge them on with their heels, until the poor creatures approach the wall, and are brought to the attack.

"The shock is tremendous, and it appears surprising that they ever survive the dreadful wounds and blows inflicted with their teeth, their heads and their trunks. There are frequent pauses during the fight; it is suspended and renewed; and the mud wall being at length thrown down, the stronger or more courageous elephant passes on and attacks his opponent, and putting him to flight, pursues and fastens upon him with so much obstinacy, that the animals can be separated only by means of cherkys, or fire-works, which are made to explode between them; for they are naturally timid, and have a particular dread of fire, which is the reason why elephants have been used with so very little advantage in armies since the use of fire-arms. The boldest come from Ceylon, but none are employed in war which have not been regularly trained, and accustomed for years to the discharge of muskets close to their heads, and the bursting of crackers between their legs.

"The fight of these noble creatures is attended with much cruelty. It frequently happens that some of the riders are trodden under foot, and killed on the spot, the elephant having always cunning enough to feel the importance of dismounting the rider of his adversary, whom he therefore endeavours to strike down with his trunk. So imminent is the danger considered, that on the day of combat the unhappy men take the same formal leave of their wives and children as if condemned to death. They are somewhat consoled by the reflection that if their lives should be preserved, and the king be pleased with their conduct, not only will their pay be augmented, but a sack of peyssas (equal to fifty francs) will be presented to them the moment they alight from the elephant. They have also the satisfaction of knowing that in the event of their death, the pay will be continued to the widows, and that their sons will be appointed to the same situation. The mischief with which this amusement is attended does not always terminate with the death of the rider; it often happens that some of the spectators are knocked down and trampled upon by the elephants, or by the

crowd; for the rush is terrible when, to avoid the infuriated combatants, men and horses in confusion take to flight. The second time I witnessed this exhibition I owed my safety entirely to the goodness of my horse and the exertions of my two servants.

"But it is time we should quit the fortress, and return to the city, where I omitted to describe two edifices worthy of notice.

"The first is the principal mosque, which is conspicuous at a great distance, being situated on the top of a rock in the centre of the town. The surface of the rock was previously levelled, and around it a space is cleared sufficiently large to form a handsome square, where four fine long streets terminate, opposite to the four sides of the mosque; one, opposite to the principal entrance, in front of the building; a second, to the back of the temple; and the two others, to the gates that are in the middle of the two sides. The ascent to the three gates is by means of five and twenty or thirty steps, of beautiful large stone, which are continued the whole length of the front and sides. The back part is cased over to the height of the rock, with large and handsome hewn stone, which hides its inequalities and tends to give a noble appearance to the building. The three entrances, composed of marble, are magnificent, and their large doors are overlaid with highly finished plates of copper or brass. Above the principal gate which greatly exceeds the others in grandeur of appearance, there are several small turrets of white marble that produce a fine effect; and at the back part of the mosque are seen three capacious domes, built also of white marble, within and without. The middle dome is much larger and loftier than the other two. The extremity of the mosque alone is covered: the space between the three domes and the principal entrance is without any roof; the extreme heat of the climate rendering such an opening absolutely necessary. The whole is paved with large slabs of marble. With the exception of the three great domes, and the numerous turrets, which are all of white marble, the mosque is of a red colour, as if built with large slabs of red marble; although it consists of a species of stone cut with great facility, and apt to exfoliate after a certain time. The natives pretend that the quarries from which it is taken, reproduce the stone by degrees: this, if true, is very remarkable; but whether or not they rightly attribute it to the water which fills the quarries every year, I cannot decide.

"The king repairs to the mosque every Friday, for the purpose of prayer; that day corresponding in Muhammedan countries to our Sunday. The streets through which he passes are watered to lay the dust and temper the heat: two or three hundred musketeers form an avenue from the gate of the fortress, and as many more line both sides of a wide street leading directly to the mosque. The muskets of these soldiers are small but well finished, and have a sort of large scarlet covering with a little streamer on the top. Five or six horsemen, well mounted, are also ready at

the fortress gate, and their duty is to clear the way for the king, keeping, however, at a considerable distance in advance, lest he should be incommoded by their dust. These preparations completed, his majesty leaves the fortress, sometimes on an elephant, decorated with rich trappings, and a canopy supported by painted and gilt pillars; and sometimes in a throne gleaming with azure and gold, placed on a litter covered with scarlet or brocade, which eight chosen men, in handsome attire, carry on their shoulders. A body of omrahs follow the king, some on horseback, and others in palanquins; and among the omrahs are seen a great number of mansebdars, and bearers of silver maces, whom I have elsewhere described. The other edifice in Delhi to which I would draw your attention, is what they call the caravansary of the princess, built by the celebrated Begum-Saheb, Shah Jehan's eldest daughter, of whom I have so much spoken in my history of the late war. Not only this princess, but all the omrahs who wished to gain the favour of the old monarch, embellished the new city at their own expense. The caravansary is a large square with arcades, like our Place Royale, except that the arches are separated from each other by partitions, and have small chambers at their inner extremities. Above the arcades runs a gallery all round the building, into which open the same number of chambers as there are below. This place is the rendezvous of the rich Persian, Usbec, and other foreign merchants, who in general may be accommodated with empty chambers, in which they remain with perfect security, the gate of the caravansary being closed at night."

TOM CRINGLE.

March 12th, 1865.

DELHI TO LAHORE.

No. XX.

I left Delhi with regret at 1 P. M. of 6th November, and arrived at Kurnaul (72 miles) at 1-30 A. M.; then on to Umballa (45 miles) at 2 A. M., arrived there 10 A. M. At eight miles from Umballa, I crossed the Markunda river, at three miles I also crossed the Oomlah, and immediately after the Gogaria—all formidable streams in the rainy season; a railway well-bridge was in course of building over the latter. The bricks made there are so good, that I brought one down to Bombay and lodged it, as a specimen of their good quality, in the Victoria Museum.

The country about Umballa is full of babool trees. I left for Lodianah (71 miles) at 10-45 A. M., and arrived there at 4 A. M. 7th; started for Jullunder (32 miles) at 5 A. M.; at 6-30 A. M. crossed three

branches of the river Sutledge, the first of the five mighty rivers of the Punjaub; and arrived at Jullunder at 11 A. M.. The above are all military stations, and I was much impressed with the order and neatness in which they are kept, under the single will of a despotic military bazaar-master, which is not the case in cities having a municipality and large funds at command, but no power to execute their behests; thus the inhabitants get a large share of British liberty, but of life very small—and very dirty whilst it lasts. Jullunder struck me as a pattern station; all its roads are laid out at right angles, and planted on each side with trees. It has a good hotel, is very healthy, and has to boast, with Cochin, of making the best bread in India, whilst Bombay, with its Opera, cannot command a loaf of clean sweet bread. The bazaar-master of Jullunder should have the highest grade of the "MEDAL OF ORDER!"

This is the near neighbourhood of the great battles of Ferozshah, Sabraon, Aliwal, and Chillianwallah, fought under Sir Hugh Gough. At noon of the 7th started from Jullunder for Lahore (86 miles), crossed, what the natives all called the Beas, (but which is really the Sutledge) by a bridge of boats; the north or right bank is 250 miles from Delhi. It is a most formidable looking river, about a mile broad, with sandy bottom. Before this I also crossed the Kala Beah, or Kala Nuddee, by a bridge of boats, 242½ miles from Delhi. The north bank of the Sutledge rises in a cliff of hard sand, forty feet above the river bed; this is very noticeable as being the first ground, since leaving Calcutta, where the eye could detect any difference of level. The sun had gone down and the short span of our Indian twilight was fast deepening into night as I sat, smoking my pipe, on the top of the cliff overlooking the broad river, and pictured to my mind a victorious foe pursuing a retreating army. What feelings of despair would seize on the beaten troops on arriving on its banks and finding the bridge of boats swept away! What would be its fate, with the forbidding rapid stream, swollen by rain, in front—behind, a ruthless enemy? I take pride in calling myself an Englishman, when I know, that were my countrymen in such a strait, and led by the right sort of man, they would face the foe and snatch a victory from him, even in their hour of despair; speak, Corunna, and tell of the limping half-starved shoeless soldiers who, under the gallant Moore, did a like deed, that in itself cast a greater halo of glory round those who fought there, than Waterloo itself could claim. Of such are the brave British soldiers, when led by a Napier or a Hugh Rose—Generals who also knew how to reward the

humble instruments who gained their country such undying victories; not so the exalted Wellington, as selfish as exalted: the only legacy *he* left the winners of his fame and honours, was to deprive them of half their pension. Apart from his merits as a successful General, his name was loathed by the soldiers who fought under him. The British soldier has ever faithfully served the *richest and most ungrateful country in the world.* And the day will yet arrive when she will reap the fruits of her mean parsimony.

I arrived at Lahore (316 miles from Delhi) at 5 A. M. of the 8th November 1864. After a bath and breakfast I hired a buggy with a chesnut horse (it is well-he should be known) to see the lions of Lahore—the capital of the old "Lion of the North," Runjeet Singh, whose kingdom (like Alexander's) fell to pieces at his death, like many other dynasties when suddenly deprived of the iron will and master mind of those who raised them to greatness. I first started for the fort, and whilst driving along, the horse frequently swerved to the right; I used to give him the helm hard a starboard, but nothing could stop him, until he had indulged in this freak for a few yards or so, when the horse-keeper would lead him back to the right track, and on we would start afresh; there was no vice in the animal, he had simply been spoilt by Hindoo drivers, like thousands of others who are undergoing the same course of ill-training all over India. To enter the fort gate we had to cross a drain culvert bridge, the parapet of which was only some four inches high. It was just at this place that my unwise friend, the chesnut horse, took his usual bolt to the right. I saw in a moment he would come to grief, and tried to save him by applying a 2-man-power strength of starboard helm, as I knew that I was, this time, to share the penalty of his bolting propensities—so I pulled like "old boots," and had *all-but* brought him to a stand still on the brink of the parapet, when by moving his foot a trifle further, it struck against the parapet and "overboard he went;" I fully expected to follow, under an inverted buggy, with the horse's heels tickling my ribs, but to my great satisfaction and content, the buggy wheels only impinged against the four-inch parapet wall, and the harness being ancient and rotten, and the buggy shafts the toughest in the world, the nag went down, leaving only tattered remnants of straps and buckles hanging to the shafts. But where had the horse gone to? I expected, that having reached the bottom of the drain nullah, he would get up and begin to kick, or do *something.* But not seeing or hearing him, I craned my head over the splash-board, and then discovered that he had

found a "lower depth still," in the shape of a round waterscour well, about four feet deep, and the same width, made by sensible engineers to prevent the scour of water from sapping bridge foundations when built on alluvial soil. There stood my steed, in an inverted position, fairly balanced on his head, like an equine acrobat! By pushing down his hind quarters, and at the same time pulling up his head, we thought to get his fore legs out of the well, in lieu of which he so struggled as to manage to get all four legs in, where he stood like a "Jack in the box," and appeared to think that the thick of his troubles were over, and that he *must* be hoisted out of the well. If so, he reckoned without his "fare," for having run the buggy out of the way. I stood on the parapet, and laid on the whip. He stared about for Jupiter to help him; I rained on the blows harder, until he suddenly raised his fore quarters, and very cleverly jumped out, only bruising a hind fetlock in the effort. Having made the horse-keeper scrape some of the mud off him, I, much to his surprise, cut up a rope he had, wherewith to make a new back-band and traces, and having, only a few days before, seen a circus-boy nearly killed by a fall, but who was quite restored by forced running exercise, I reasoned that it would only be logical to suppose that the same treatment would also be good for this horse. Thus guided by inductive reason, I drove him about all day; and after the first half hour he ceased to show a sign of lameness; and he was equally sound next day. This hint may be useful to many—never let bruised limbs stand inactive—*to set cold*—exercise, exercise; the mischief then nearly, if not quite, disappears.

Within the fort are crowded, narrow streets, like some of our old Border towns used to have in the middle ages. It has an inner citatel on a hill at the back, within which is the palace, and the tomb of Runjeet Singh. Attempts have been made to give it a decorative air, like the celebrated tombs about Agra. But the famous master grand arch-masons of those days are dead and gone long ago, and the tomb is simply decorated in the theatrical tawdry style, so often mistaken by the modern Eastern mind for chaste magnificence!

The Exhibition building was nearly finished; it looked in its Gothic garb, like meeting an old friend we had long ago parted with in our dear mother country, and by no means deserved the critical censure which one or two editors of the North-Western newspapers bestowed on it. Everything was being furbished up; roadside railings were painted green, the side turf pared level, even flower beds and shrubs had been

transplanted for road-side decorative effect; everything looked nice and clean, ready for the honored visit of the Viceroy, when, as I sat at breakfast next morning, at 8 o'clock, a young member of his staff arrived, and told his friends at the table the sad tidings that Lord Elgin had been given over by the doctors.

The railway is now finished from Umritsur to Lahore (32 miles), and from Lahore to Mooltan (208 miles), and it will no doubt soon be extended on to Hyderabad in Scinde, and then on to Kotree, where it will join the line of 105 miles, long since completed, to Kurrachee.

In my next I go from Lahore to Mooltan (205 miles), and thence down the Indus, about a distance of 1100 miles, owing to the river's circuitous windings.

TOM CRINGLE.

March 16th, 1864.

LAHORE TO MOOLTAN.

No. XXI.

One of the strangest means of locomotion which we have ever travelled by, is that supplied by the Lahore Post Office. It is the under-frame of a truck with springs placed on four wheels, to which is attached two horses as in a carriage break. The driver sits on the usual box seat, with room for one sitter by his side, and a groom sits or stands on a step behind. On the frame of the truck, the traveller lashes a dhoolie, or palanquin, in which he rides. It looks rude, but is far from being uncomfortable. Luggage is lashed on to the truck both behind and before the dhoolie.

I left Lahore (situated on the left bank of the Ravee) on the 9th November, at 9 A. M. At sunset I was 72 miles distant; at 9 A. M., next day, I was 139 miles on my way; and at 10 P. M. of the 10th I arrived at the travellers' bungalow at Mooltan, having occupied 37 hours in travelling the 205 miles, being at the rate of $5\frac{1}{2}$ miles per hour, including stoppages for changing horses.

With the exception of the first four or five miles out of Lahore the whole distance is through close-tangled forest jungle (but barren of trees of construction), except a few open patches under cultivation near the posting stations. About 20 miles before the traveller reaches Mooltan, he will find the country desolate and bare, except where there are wells for irrigation,

when the place watered blooms like a rose of Sharon. But on a nearer approach to Mooltan, trees and shrubs again cheer the eye, as from the geological character of the soil, so near the great river Chenab, and on a dead level, water *must* be found at a moderate depth, and in a hot climate like Mooltan, an old hop-pole would blossom if watered. One striking feature of novelty meets the traveller's eye, for the first time—the whole road up to within twenty miles of Mooltan is *metalled or paved* with straw! This is owing to the entire absence of stone in the country passed through. The soil is all pure alluvial deposit, left ages ago by the meanderings of the rivers Sutledge and Ravee; not a pebble is to be found, nothing but soft soil, which looks to the eye as if composed of two parts mud and one part sand. Carriages dragged over such a soil would kill the posting horses in a month, so a single track, broad enough for one carriage only, is laid over with a transverse layer of tall reed grass spread on ten inches thick; the grass itself is about ten feet long, and the ends of it are covered at the sides of the track with soil to keep it from being blown away, or from being easily moved by the tread of the horses passing over it. There is an old saying about setting the Thames on fire, but every old sailor, when Thames water used to be kept in casks on long sea voyages, has seen liquid portions of the dear old river in flames, when saturated with an undue proportion of carburetted hydrogen gas. Well do I recollect, when a boy, holding my nose to avoid the putrid smell, when thirst compelled me to drink such "waters of bitterness." But knowledge gives comfort as well as "power," as I now know that by plashing such water from one vessel into another it parts with its undue gases, and becomes aerated by imbibing its proportion of oxygen, which sweetens it and makes it palatable. Condensed water is often given to cattle on board steamers, without undergoing such a process, which is cruel and injurious to them. I beg the reader will excuse this digression. With a road thus paved with straw, one would think that the motion of a carriage over it would be soft and without jolting; but it is not so, owing to the lazy labourers not having filled in the deep ruts, left by the past monsoon traffic; these are merely covered over with the loose straw, and are felt by the shaken traveller like bones in the ground. Setting the Thames on fire does not sound more impossible than setting a road on fire? On one occasion when lighting my cigar, I threw away the still-burning *fusee*, and only from my servant looking back by chance, I fear the whole road would have been burnt all the way back to Lahore, as the

straw had caught fire; so summoning all hands, we ran back, and when we got there, found ourselves without water, or buckets if we had had it, and thus stood staring in helpless astonishment until I bethought me to take my "fire brigade" fifty feet beyond the fire, to leeward, where we threw dust on the straw with such a will, that when the fire reached the spot, it was easily conquered. A fire is more easily put out with dust, mud, gravel, and such like, than with water, which contains so much oxygen, that it, in some measure, feeds a fire, unless it is applied in drenching quantities. Wet hay, or dung, by its raising a great smoke, and thus preventing the oxygen-laden atmosphere gaining access to the fire, is a good extinguisher. This large tract of country appeared at first sight admirably adapted for breeding horses, as it has no tigers and only a few leopards, but on further enquiries I found that all the horses then working on the road were wild and unbroken in consequence of the old stagers of the previous year having died from leech bites. If these little bloodsuckers could thus kill horses in their stables, they would not have a chance of living in the heart of the jungle. The country is level as a billiard table, and with the great *Baree Doab Canal*, and its branches running down between the mighty rivers Sutledge and Ravee, this land ought to grow corn enough to feed all India. When I passed over the canal, I noticed that if sluice-gates were fixed to raise the water to the level of the surrounding country, it would have afforded the means of irrigating millions of acres, as wherever I saw wells for irrigatory purposes, the grain crops (grown mostly for the support of the large number of men and camels, working on this road) were green and luxurious. Let us hope that now a railroad connects Lahore and Mooltan—soon to be extended across the Indus to Kotree, whence to Kurrachee the railway is already in use—this country will gradually be filled with a contented and robust population, living in towns and cities, and forming *preserves* of stalwart men from whom we shall be able again to recruit our armies to fight on the future battle-field of India—the north.

I regretted to have arrived by night at Mooltan, and was thus deprived of the opportunity of seeing the places made interesting by the murder of Mr. Agnew and Lieutenant Anderson, who were slain by the Sikhs under Moolraj, on April 21, 1848. This led to the siege of Mooltan, during which a conflict took place between the British and the Sikhs, in which the latter were driven with heavy loss into the town on 7th November 1848. The fort was taken after a protracted siege and bombardment on the 2nd January 1849, and

the inner citadel capitulated, together with its garrison, on the 22nd January 1849. With these eventful days crowding on the memory, as I gazed up at the frowning huge fortress which, looked in the dark, with the sky for a back ground, like a mountain of black rock, I could not but picture the gallant Sergeant Bennett, the first to mount the breach, and stand on its highest summit, firm as a rock, with the colours planted by his side—he and they a mark for every vengeful bullet fired from the citadel above. Brave Serjeant Bennett was made a lieutenant, and the fine old soldier now lives at Poona in the midst of his good and happy family, loved and respected by every one who knows him.

I found a very good and large travellers' bungalow at Mooltan, where I arrived at 10 P. M., and to my surprise learnt that the river bank,—at Ghara where the steamer starts from,—was five miles off; and further, that I was to have my luggage weighed at that impossible hour of the night, at the Indus Steam Flotilla Agent's Office, in some (to me) unknown nook of a town, shrouded in impenetrable darkness. But having ascertained that I could hire two buggies to take my impedimenta to the steamer at daylight next morning, I determined to trust to the chance of having my kit weighed at the bunder; so went to sleep, and dreamed horribly of the agent weighing myself, servant, and kit in a pair of huge scales sixty feet high, suspended over the river, and every now and then down we went with a dive under water, when we could see half a dozen crocodiles making hard for us, and the scales would bound up only just in time to save us from being torn to pieces by them, as they leapt up after us with a vengeful disappointed gasp—the agent's man bawling out each time we came to the surface, *bhote bharee* (very heavy). At last, I awoke with a gasp of terror as I thought one of the huge saurians had seized on me for his breakfast, when I found that the sun was just rising—the buggies stood at the door—and Lalla, my servant, was assisting to lift a heavy box into one of them, whilst the driver stood by shouting with unheeded rage, *bhote bhuree* which, in my troubled dream, I had attributed to the agent's man. What a happy deliverance! Here was I miraculously saved from the serried jaws of crocodiles—my hotel bill paid (a traveller never can light his cigar comfortably until his hotel bill is paid). I was mounted like a gipsy child, on a heap of baggage piled in a buggy, the blessed sun was tipping everything with gold, the little birds were chirruping merrily about; my cigar drew well, and I had mental visions of sights to be seen on the

great Chenab, and on the greater Sutledge yet lower, then to be succeeded by the mighty Indus when its own waters are swelled by the united giant streams, which give name to the Punjaub—(the country of the five rivers) the Jhelum, Chenab, Ravee, Beas and Sutledge. I got on board all right, over a great plank which reached from the crumbling alluvial river bank to the deck of the *Sir Charles Wood*. This fine steamer was 1,000 tons burthen, 120 horse-power, length 200 feet: breadth, inside paddles, 38 feet, outside paddles, 54 feet; diameter of paddles 22½ feet; length of stroke 7 feet; depth of hull, 6 feet; draught of water—light, 2 feet 3 inches; when loaded, with 100 tons of cargo and 50 tons fuel, 3 feet; height of cabins, 9 feet; height of saloon, 10 feet; and commanded by T. D. Fleming, a most worthy man and watchful captain; the chief officer was Mr. Joseph Else Dixon, both of whom the passengers liked very much, for they made our trip of eleven days down to Kotree, like a pleasant pic-nic. The captain kept a first-rate table, and the vessel was unexceptionable. As I write it is now striking 12 o'clock, the hour when ghosts begin to nudge people's elbows, so I'll say good night, with a promise to let you know in a future letter how we got down the Indus, and the sights we saw on it.

TOM CRINGLE.

March 19th, 1864.

DOWN THE INDUS.

No. XXII.

After having got aboard, and the luggage stowed in a fine large cabin allotted to my sole use, I began to look about at our closing connections with the river bank. First came sixty broad-shouldered Punjaubee convicts, warily moving along the large springy gang-plank for fear their gyve-bound limbs might cause them to topple into the rapid, seething current beneath. Then a large heap of luggage, followed shortly after by the owners, Henry Hipsley, Russell Jeffrey, and Wm. Brewin, of the Society of Friends, quickly followed by Mr. Thomas Black, the celebrated Italian, Scotch, and Irish vocalist, accompanied by Mr. Phillips, his pianofortist. These were all the first class passengers who were bound down river, besides myself.

Punctually at 8 A. M., of the 11th November, we cast off the

head rope, let her bow swing round by keeping fast the stern hawser, and directly the swift current got a fair hold of the steamer's bow, she was swept round to the down river direction with irresistible force, and when nearly in her proper direction—"go on ahead" and "let go all"—was the cry, and off we went at sixteen miles an hour over the river bottom, with two river Flats in tow, each carrying 250 tons of cotton, heaped up like the roof of a Bombay bungalow.

At 8-30 came Captain Fleming to invite us to take our first seat at his breakfast table, where we were gratified to find that we had a cheerful and liberal host who kept a well-found mess. Here I first became acquainted with the custom amongst the members of the Society of Friends of giving a few minutes to self-meditation after meals. The Friends asked us whether we had any objection to its observance? Not at all, and we at once assented. To Mr. Black the custom would fit in to his highly moral and religious character, and Mr. Phillips and myself made the best of the opportunity we could. It certainly did not prove irksome to me, as its practice was justified by the pure Christian lives of these gentlemen; they daily improved in our estimation the more we saw of them. And I shall never forget to admire them for their pure, truthful lives, their great, and varied store of knowledge, their childlike simplicity of character, coupled with a cheerfulness which was never-failing and very charming. Their mission to this country, as a deputed body from their own sect, was to inspect, inquire into, and report on the Christian education then at work in India. To men past the middle age of life it was no small act of devotion to undertake a long journey all over India on such a responsible mission; yet they did it with a cheerfulness quite refreshing. I was very glad to hear them speak in such high terms of the sympathising aid and facilitating courtesy of our Governor, Sir Bartle Frere.

After breakfast we went up on the long promenade deck, which was ten feet above the sponsons, with thick double awnings above, and where there was nearly always a cool pleasant breeze from the rush of the vessel through the water; here was a fine promenade 180 feet long, from which we had a fine view of the banks of the Chenab about 20 feet high, with its vast flocks of water-fowl, its high reeded shore, and its serpentine course, until lost in the still greater Sutledge at Meeance. On we go, circling round the great bends in the river until at sunset we espy large wood stacks on the right-hand steep bank of the stream. The huge steamer is rounded-to with her head up against the current, and

cleverly run with her bows into the soft alluvial bank, into which it cut like cheese—the mate and a large party of smart lascars swarm out on to the shore taking with them stakes 6 feet long, which are quickly driven into the soft soil, and to which a stout coir hawser is made fast—the engines turning slowly ahead to hold the vessel up until this operation is performed. Then went all the convicts ashore under charge of the police guard, together with large cooking pots and pans to prepare their diurnal meal, which was to last them until the following night. Now commenced the brisk work of taking in from 40 to 50 tons of wood. To avoid the din this occasioned, we went on shore and strolled about a little for a change, but the desolate prospect afforded by a freshly deposited alluvium, clothed with a few tamarisks, soon drove us on board our comfortable vessel, from whose deck we could sit and watch the busy preparations for the monster evening meal for the convicts. Quickly the sun sinks below the horizon, bounded by the ocean of level grass-clad land, and the closing daylight fast disappears; the cooking fires now light up the scene, and by their fitful glare we see the prisoners, some preparing their humble store of eatables to give a relish to the hillock of rice and dhal which will presently be put before them. In the meantime, and as a preparatory purification, some are washing their bodies in the stream, others carry chatties of water from which to fill the shining brass lotahs now eagerly held out for the welcome liquid, and which utensil every native in India, who has a caste to lose, must carry to avoid pollution from wretches more degraded than himself. The huge cauldrons seeth, and boil and bubble, the white steam contrasting, by the light of the fires, with the dark figures moving around them, who only require the tattered rags of Macbeth's Witches to realize the Shaksperian scene. Presently the great cooking pots are lifted from the fire, the portions served out, when from a noisy talking hubbub, a hushed silence follows from gratifying deglutitions; let ten minutes elapse and the up-lifted, brass shining lotahs throw back reflected rays of light from the strong glaring fires, as the men wash down the balls of rice with the muddy, though wholesome water of the Sutledge. In the meanwhile we have had our after dinner coffee, with cheroot accompaniments, enlivened with anecdotes, some funny, some witty, some grave, and others biographical, all of which were cheerfully enjoyed by the Friends. The convicts are now brought on board one of the Flats, where they are located in the bows under charge of the police sentries, who stand like statues, their loaded firearms, with fixed bayonets,

reflecting the light of the still burning watchfires on shore—presently one by one of our number drop off to their cabins, and by eleven o'clock every soul is hushed in sleep. I am a fitful sleeper, the least sound awakes me—presently I hear a noise, born of pandemonium, which fully arouses me. I go on to the promenade deck, when the discordant howls of troops of jackals break on the ear, which, coupled with the desolate scene around—the darkly-flowing river, with its impetuous current, lap-lapping against our bows, its dark distance peopled with waterfowl and the hideous crocodile—the equally desolate-looking shore, with the chill, ague-laden breeze blowing down the river—all had a depressing effect, until left to its appropriate silence by the retiring jackals, whose child-like, melancholy, wailing cry sounded in the far distance like the echoes of some piteous sorrow. These scenes are repeated to the letter every evening ; for if the steamer were to attempt to navigate the river at night, through its rushing currents and thickly strewn shoals and ever winding channel, she would be fast on a sand-bank in less than five minutes. At four o'clock next morning the engine fires are lighted, in half an hour steam is up, and at broad daylight, the warps connecting us with the shore are let go—the stern one last so as to cause the boats' head to cant down stream, when we know by the tremulous motion of the vessel that we are under weigh, so we rush on deck to enjoy the cool morning air, and see the sun rise above the afar-off horizon as witnessed at sea ; then comes a grateful cup of coffee ;—a chat with the Captain ; we ask when we shall see Meance, the battle-field immortalized by the chivalric General Sir Charles Napier, who here added another glory to the honor of his country, when, on the 17th February, 1843, he fought the Ameers of Scinde, who were supported by an overwhelming allied army of the Sikhs and Beloochees ; whilst Napier had a mixed British army of European and native soldiers numbering only some 2,500 men. It is at this place where the river Chenab loses itself in the Sutledge—and still lower down the last named river is absorbed in the mighty Indus, whose snowy home is hundreds of miles away in the far angle of the distant Karakoram Range of the Himalayan mountains, whence it threads its tortuous path to where the fair Cashmerian laves her rosy cheeks in its sacred stream as it passes the valley of her birthplace.

On the 12th, after starting at daylight, we ran on a sand-bank with a shock which made everything quiver. This caused the steamer to swing broadside on to the stream, which got one of the Flats "snagged" by a drift tree, with its roots imbedded in the sand. We floated off, after the lapse of ten minutes, and

steamed on until we got to a deep part of the river, when we turned her up channel to enable us to land our lame duck on a steep beach of the river, when all hands tumbled off the cotton bales on to the shore until they were able to clear a space where the damaged part could be got at; then the Engineers went to work with a will, and put a patch over the hole by evening, ready for a start in the morning—the crew re-stowing the cotton bales all night.

At 8 A. M. the 13th, met a steamer going up with two flats in tow. And at 10-30 same day met steam-tug *Indus* with 2 flats in tow on each side. This is considered a task which few of the boats then on the river could accomplish. She belonged to the Oriental Inland Steam Navigation Company, whereof Mr. Dunne was the active manager, and who is highly respected by all who know and serve under him. At 12 of the same day met the steam-tug *Sir Henry Havelock* of the I. O. I. S. N. Company,* with two flats in tow. Seeing a *bonnet* on board I sent a box of Peshawur grapes and some rosy apples to it—bonnet made me happy for the day by nodding to me! and we parted, the *Indus* to battle with the current of her namesake, whilst we like a good-tempered, wise man, went with it.

The river Indus demands a page or so of description. It is here of great breadth; and if evidence is wanting of its destructive fickleness, look afar off on both sides, and there behold a space some 12 miles broad where she has altered her course—sweeping away with resistless might forests of fine trees—villages, farm homesteads, and smiling cornfields—all sapped and undermined by her pitiless waters. This belt of land is easily recognised by the absence of forest trees of construction—the village has been rebuilt—detached homesteads have again sprung up, bounteous nature has again made the grain-field to nod with glad plenty—but forest trees are of slower growth, and thus (by their absence) make the demarcated line of former ruin only too plainly visible. As we steam down with the rapid current, the captain would show us silted up channels where he navigated two or three years before, and where now are cornfields. One great characteristic of this river is its never-failing serpentine course; I do not recollect four straight reaches over the whole estimated length of 1,100 miles we came down its waters. Our bow is pointing to a low, tapering, steep bluff

* Why will "promoters" persist in inventing such stupid long names—names which, from the unmeaning intricacy of their initials, are sure never to be learnt except (after hard practice) by their own employés. I believe the above stands for "Indian and Oriental Indus Steam Navigation Company." The man who invented it should be kicked to death by butterflies.

bank on the opposite side of the river; we close on it, and this bluff bank becomes steeper and higher until our vessel of 1,000 tons burthen can run so close to the shore that a man could easily leap to it from the paddle-box—the tide at the same time running like a mill-stream ; this bluff bank is some 20 feet high, and on about a four-mile radial curve. As we rush along side the bank large masses of the friable earth tumble into the rushing stream, and are instantly swept away to form shoals lower down. On ahead we see the bluff, precipitous point which forms the down stream horn of this crescent curve, if we attempted to turn, which we should be fixed for the season on the sandbank which this salient point has created, and which all salient points will create in a stream which has a rapid current, and suspended alluvial matter in its waters wherewith to form one. We therefore run over to the other side at an angle of 45 degrees—with the mad waters rippling over the shoal on our down-river side, which has been formed as described ; and make for the commencement of a similar crescent bluff on the other side of the river. Sometimes notwithstanding the watchful look-out of both Captain and Pilot, the steamer will bounce on to a sand shoal and swing broadside on to the stream; when the eddy under her lee will quickly eat away the sand from her bottom, and in a little while she will perform a polka whirl round, and off we go again. If there were any rocks in the lower Indus I think it would be impossible to navigate it ; such, with the exception of a few straight reaches at rare intervals, is the navigable course of this broad but shallow river. Let us now glance at some of the sights to be seen on it. As we pass by one of the shoals already described, we remark to each other on the great quantity of drift wood on it, to which we all assent, when presently one of the party suddenly exclaims, "Give me the glass, I saw something move." Yes, what we thought were logs are crocodiles, all alive, looking out for a dinner. These saurians ranged from about twelve to four feet in length.

Every shoal we pass has a more or less number on it—sometimes we would be steaming right on to a crocodile crossing from one shoal to another, but he always dived out of harm's way when we got very close.

Presently we perceive a man emerging from the tall belt of high reeds which line the banks in some places; he cuts down a lot of reeds, binds them into a compact sheaf of one foot diameter in its thickest part, with the small ends tied in a pointed form like the prow of a canoe—ties his clothes on his head, and then, with his ferry-boat between his legs, a-la-cock-horse, he

swims across this rapid and broad river—alive with crocodiles—without harm! We saw dozens of such reed floats, which, having served their purpose, had been cast into the stream and had grounded on the shoals.

The water-fowl in the quiet reaches of the river are very numerous. In some places acres of water surface were alive with them; on several occasions they stayed until our vessel approached quite close, and on two occasions we shot down both wild geese and ducks from the steamer's deck, and fine eating they proved. Some of the shoals in the river would be literally covered with geese of a browny black, with white under body. But the most interesting sight was a flock of pelicans, which covered several acres of ground on the right river-bank; they were packed so dense as to look like a field of snow. I do not think it is generally known that the Indus fishermen use the pelican to catch fish by diving after them from the side of a boat, precisely as do the Chinese employ the cormorant for the same purpose. I saw boats with the birds on board, but it was evening, after their labours had ceased. Of snipe, plovers, sandpipers, gulls, together with every variety of the crane and flamingo tribe, there were myriads. One beautiful sight, which three of us passengers saw, I can only faintly describe, but cannot account for on optical principles. If any of my readers can do so I shall be very much obliged, especially if the explanation be from the graceful pen of a lady. One day about one o'clock in the afternoon, vessel's head about south, we were passing along pretty close to the right bank of the river, when we saw standing on the shore a crane some four feet high, neck long and dark with elongated delicate head of a bluish colour; upper body and upper surface of wings, a dark brown; under wings and breast white—whilst reaching from tip to tip of the white under surface of the wings was a brown band apparently three inches broad. The sky was cloudless, with a bright sun; presently as the steamer neared the crane he leisurely flew off and upwards, and I thought no more of the occurrence until Mr. Black pointed him out to me at an immense elevation, and gyrating in the most graceful curves the eye could desire to see—so slow and majestic were his movements. My companion pressed me to take the binocular glass and view his beautiful colours, which I was not in a hurry to do as I had seen the bird close to, and did not think it handsome enough to take the trouble. I, however, took the glass, and looking up at the crane, could only see its ordinary colours, but Mr. Black urged me to keep it in the field of view, and I should presently see a splendid sight, which I did, and it

will never fade from my memory. As the bird gyrated to the south side of its circle, only its ordinary aspect was visible, but as it approached the east and west intersection of it, the colours began to change to the primals, as seen on the lower limbs of a rainbow, and when it reached what may be described as its N. W. radial point of the circle, its breast was like the driven snow in its pure white, and what was in reality a brown stripe from tip to tip of its wings—reaching also across its breast—now showed a crimson of the most dazzling intensity the mind can conceive—our carmine and crimson colours were dull and pale by comparison. The pure white of the body, and this intense crimson stripe, looked so mysterious and fascinating that the greedy eye was loth to quit the gorgeous sight, and I had only time to call Friend Jeffrey to enable him to see it before the crane flew away. If any gentlemen should read this, and should chance to steam on the Indus—or any other Indian river, I should wish them to watch for a like sight, and publish an account of it.

The natives lower down, on the more populated bank of the river, have an amusing and ingenious way of catching wild geese and ducks. They stuff the skin of a pelican and fasten it on their heads, with a small peep-out place in front; after tying calabashes to their waist for support, they wade into the deep water amongst a flock of wild geese, and imitating the side-to-side movement of the pelican, they approach the unsuspecting flock, member after member of which are caught by the legs, dragged under water, and fastened to the girdle; when as many have been captured as the calabashes will enable the man to float with, he glides gracefully to the shore, discharges cargo, and goes out on a piratical cruise again.

The fishermen are very clever who fish for *poller* (the whitebait of the Indus). These, although a large fish, and highly esteemed by the Kurrachians, are only caught between Sukkur and the mouths of the Indus. They are conveyed by rail from Kotree on the right bank of the river, to Kurrachee (105 miles), where they are eagerly bought up. The manner of taking them is as follows:—The fisherman has a large earthen chatty (or pot) from two to three feet diameter. The mouth is about one foot, on which they rest their belly; their net is triangular, and attached to a forked pole from 15 to 20 feet long. This net is adroitly sunk in the stream, and when a fish strikes the net the concussion is felt by the man and indicates a capture—the net is raised, the fish secured, a small stiletto is driven into the spine, and the captor puts his prize in the mouth of the chatty by a

momentary rise of the body, when down goes the net as before; when his chatty-boat is as deep in the water with its poller cargo as it can float the fisherman paddles with his hands to the shore, sells the fish to buyers who wait for them, then shouldering his net, and putting the chatty on his head, as the ancient Britons carried their coracles, walks up the river again and launches his chatty for a fresh venture.

TOM CRINGLE.

March 23rd, 1865.

DOWN THE INDUS—*(Continued)*.

No. XXIII.

20th November.—Cast off as usual at daylight. Captain Fleming had advised us to be on deck soon after we started, as we should have a fine and near view of the Sehwan Hills, and the road over them by which the Macedonian hero entered Scinde. We approach the range down one of the few straight reaches of the river we noticed, with the hills on our right. When just opposite the Pass there was a splendid sight for the geologist: at this point there appears to have been a sudden upheaval of the range, which had (to my view of the scene) the instant effect of turning this FATHER OF THE PUNJAUB WATERS suddenly at a right angle to the left from the range. On looking at the summit there lay the half-sandy half-muddy former bed of the Indus on the slope of the upheaved hill-side, as if it had been done only a minute before, and we had been spectators of the sight. I never before saw "cause and effect" written by the hand of Nature in such bold legible characters. At the time we came down the river the water was low enough to afford a thorough view of the strata usually seen in the perpendicular banks of a river flowing through sand alluvial; it was striated with thread-like lines of minute matter usual in all fresh-water formations. The reader will concur with me in the opinion, that it was a strange and instructive sight to see the former river bank perched on the very summit of the hill some 300 feet above. And what gave it an enhanced effect was its disrupted cross section caused by the upheaved sand-stone being higher at the part of the ridge farthest from

where we viewed it, and lower nearer towards us, which caused the soft soil of the river bank to break perpendicularly; thus was the whole cross section laid bare, and there stood revealed the identical striated river bank, which ages ago had joined on to the low bank which then bounded the waters of the river.

But there was an allied sight connected with the one just described, which was equally grand, and which bore incontrovertible evidence of the suddenness of nature's attempt to bund back the Indus. From the former river bank thus perched on the summit of the ridge, there reached, sloping down at its angle of repose (about 60 degrees) the former broad river bed—inclined, when first up-heaved, to roll in sluggish wave-like undulations from want of consistence—but the aqueous matter being soon driven off by the subterranean heat, stilled its rolling motion, and there it now lies on the side of the Schwan range, like an open book, with the page "UPHEAVAL" turned down for geologists (or any one else) to read. I had, however, nearly omitted to mention that the silicious matter, ever blowing over the sandy plains of this portion of Scinde, has had the effect of giving this friable alluvium a regular coat of glazing like potters' ware; I might have missed noticing this interesting geological fact, had not the newly-risen sun from the east cast its low glancing rays on to the side of the hill, and thus revealed this interesting sight. The sudden deflection of the river by this upheaval of the Schwan range, has here filled its bed with difficult shoals, which we had great difficulty in threading our way between, and which makes this part tedious to navigate, both for the Scindian pilot and the captain; but these shoals once passed, the navigation is pretty fair.

We at length approached Sukkur, the banks of the river clothed with the dark melancholy tamarisk. As we draw near, we note the deserted military cantonment built on a hill about 150 feet high above the surrounding plain. On the summit of one of the hills are the ruins of a large tomb; on another a lofty minaret 100 feet high. These hills, situated immediately behind the town, bear strong evidence that the river once ran between them, so as to cut off the acute angle which Sukkur now occupies. When near Sukkur we pass the large town of Rorce to the east, and the fort of Bukkur on an island nearly in midstream, to the west, and which islet fort intervenes between Rorce and Sukkur. The fort of Bukkur, if strongly built, would effectually bar the Indus against any enemy from either up or down the river. In a moment after passing the fort of Bukkur, we open the angle of the fort of Sukkur, round which the current flows.

As Alexander sailed down the Indus, and as no mention is made of the remarkable island-fort of Bukkur, together with the two other islets which divided the current of the river further down, it is assumed that these have been upheaved subsequent to his time, since when the river has forced its passage through the disrupted limestone range to the westward in its present channel; but before that event it is conjectured that the wandering Indus, or at least a portion of it, ran through the Runn of Cutch. A part of this impetuous river turns suddenly round the angle of Sukkur Fort to the right, and escapes between it and a small island. A little further down is another islet with a conical shaped hill, on the top of which is a saint's tomb; and yet further down, the river has delved out a deep horse-shoe bight, where the force of the current has expended itself, but the heaped up waters try back again along the side to seek an outlet to the westward, where it rushes round the point of the horse-shoe described, with the force of a cataract, and absolutely limits the tugging power of the steam boats which navigate the river. Thus it now seeks an outlet as follows :—One channel runs sharp round the angle of the Fort of Sukkur on the right; there then intervenes the small island above alluded to, and beyond this, in the same line, is the conical islet surmounted by a Mahomedan saint's tomb; to the south of this is the rapid navigable channel, running West, bounded on its left by the low rocky base of the worn down limestone-hill range so often referred to. As soon as we pass through this channel the town of Sukkur lies directly over to our right. We cross the river, round to with our head to the stream, and make fast to the bunder. The town of Roree is a little higher up the Indus on the left bank of the river, and is a comparatively well-to-do town of 14,000 inhabitants, whilst Sukkur is only emerging from the profitless dignity of having once been an ancient city, now in ruins, with a sort of modern built Thames Street, wherein to conduct her reviving commerce. We made fast to the bunder about 11 A. M., and went ashore to see the few things worthy of notice to strangers, or rather the things likely to attract the aimless attention of passing travellers. The fort of Sukkur is an oblong about seven hundred yards long and two hundred broad. The walls appear crumbling and rotten, which perhaps may be owing to the nitrous soil eating away the mortar of the brick-work of which it is built. A small heavily armed martello tower would serve all the defensive works needed. The town is partly built on low ground and partly on the side of a low limestone hill; the houses put me greatly in mind of those I have seen in some of

the larger towns in the Persian Gulf, being whity grey, flat roofed, and with small windows made with the view of keeping out the great heat of the hot season, and its attendant glaring light.

We were delighted to find a really good, well found, native boys' school. The school boys had gone to their dinner, but the native teacher very kindly soon had them mustered, and they were very satisfactorily put through their school paces by the FRIENDS of our party. In connection with the school we were agreeably surprised to find an excellent well stored library, with a large assortment of the English monthly periodicals, and all the leading newspapers of Western India and the Punjaub. We were informed that these advances in civilizing influences are due to Sir Bartle Frere, our present Governor, when he was Commissioner of Scinde.

After greedily reading up news from the familiar columns of the *Times of India*, we went for a stroll on the adjacent hills, on which have been built Barracks, Hospitals, Officers' Quarters, &c. Having picked up pieces of very fine glazed pottery, I went to a place where I saw building operations going on, and there saw the finest bricks possible; they are so fine in their composition as to more resemble the tough, close-grained red sand-stone of Futtehpore-Sikree than anything else I can compare them to.

I brought one of the bricks to Bombay, and lodged it in the Victoria Museum, as the day may yet arrive when by means of river carriage and railways, we may draw our chief supply of lime, decorative bricks, and floor tiles from this or a near neighbourhood. I believe there are many useful arts and trades in Scinde which are at this time languishing to death for a market; these the Government should look up, investigate, and assist into notice. Beautiful glazed floor tiles were once made in great plenty, and of which Bombay would take all that could be offered; it is probable the trade still exists although the native rulers have been displaced (with great benefit to the people,) yet many trades have fallen off, which the Government, as their successors, should foster and aid by ordering some each sort, to create a demand, and by placing specimens of them in the Victoria Museum.

All the Bunders are well kept, but the water alongside is too shallow to allow the steamers to lie abreast on. This is sought to be remedied by cutting away the sharp shore angle near Sukkur Fort, so as to allow a larger volume of the river to turn the angle in the channel between it and the first small island which limits the flow of the river stream, and which, if greater, would scour

the Bunder shore of Sukkur, and give the deep water so much needed for facilitating commercial operations. I was much puzzled to know why we discharged our cotton freight at this place, and from whence we loaded up another! Did the Mooltan, or rather the Punjaub, cotton go to the Sukkur "doctor."

From enquiries made I found that the cost of loading and unloading would be something serious, to say nothing of the difference in the rates of freight from Mooltan and from Sukkur. This change of cargo occupied us a day and a half, when at last we pushed off on our down voyage to Kotree. The river and its banks had, generally, much the same features as those already described, until we approached near to Kotree, when on the left or eastern bank we passed forests of fine large babool trees—but, alas! the sapping current of the river was busy eating away the end of the forest which rested on the river bank; and as we passed by, lots of noble trees were falling, or lay prostrate with their branches in the rushing stream, their roots still adhering to the shore, but presently to be torn away and whirled down the river until arrested by some shoal where their roots will soon be covered by mud and sand, and the stout limbs will become snags, when by a change of the navigable channel they are prepared to stand "like a lion in the path" to pierce the bottoms of steamboats and barges. The position of these snags is easily detected, as it is always indicated by a marked and strong ripple as if a dangerous shoal existed, but which is too local in its area to be one. There are barges kept on the river by the Government for the purpose of removing snags and other obstructions, but they did not appear to busy themselves where most needed, and altogether seemed to take things very easy. It struck me that the conservator of the river ought to have had a gang of men at the scene where the tide was cutting down the noble babool forest. Each of the fallen trees would have made four good sleepers for the Scinde Railway, for which their value would have been Rs. 16; whilst their branches and brushwood, by being staked into the river bank, would have prevented the current from eating further away into the forest of such fine useful trees so much wanted in India—there were snags too, but no one employed in removing them. This place is quite close to Kotree, although I cannot name the distance.

The navigation of such large steam boats as the *Sir Charles Wood*, on the Indus, requires a careful captain, well trained in the dangers and difficulties of his task. Although provided with a native pilot, the responsibility of the captain is very great, as sometimes (I am now speaking of the dry season when the river is

low) he has to run his vessel at her utmost speed, so as to out-run the river to acquire steerage power from the helm, and thus goes the boat for miles together with only three inches of water under her keel, and often the engines driving her over mud and sand shoals with six inches less than her draft of water.

A navigator, if a stranger to this river, would be utterly at a loss which channel to take when he comes to a part four miles broad and strewn with sand shoals apparently right across the river. Yet the pilot, assisted by the evident knowledge, and careful judgment of the captain, who, after a brief consultation with the Scindian pilot, always, in our case, chose the right one, but it required nerve and instant decision to do this, for should he happen to enter a *cul-de-sac* the vessel would probably have to remain there until the next high floods released her, as there would be no room to turn, and to back out would be impossible. The channel finally selected may be a mile distant from the one he navigated on his up-river trip; and the choice is arrived at, not so much from any tested depth of water by the hand lead, but from certain ripples and whirl-pools observed on the surface, which I always found correctly indicated the depth of water; so also do smooth, glassy surfaces, when the wind is blowing *with* the current, indicate deep water; but when the wind blows *against* the current, shallow water is smooth. I also noticed as a rule, without exception, that this wild, wandering, capricious river always throws out shoals from bluff, salient points at an angle of 45° down the river, causing a deep current of water to run along the angle or up-river side of the shoal so formed, to the opposite side, and which current gouges out the soft alluvial bank into a crescent shape, the lower salient-horn of which again deflects the current to the other side, and so on. These deflections from side to side cause the river to be singularly regular in its tortuousness, the curves occurring with great regularity at from one to four mile intervals according to the composition and stability of the banks, with rarely an intervening straight reach showing a fair navigation. Sometimes the navigable channel becomes so contracted that a broad boat like the *Sir Charles Wood*, with a barge on each side, having a united breadth of 116 feet over all, has only just room to rush through it; and it requires nerve and skill so to place the boat head on, and run her through it at full speed, as to preserve steerage way whilst the current is going like a mill-race. But even here, should she hang for want of water, the sapping, gnawing tide eats away the sand from the vessel's bows backwards, and soon causes her releasement; sometimes the steamer strikes

an isolated shoal, when she will make a regular polka dance round and round, but the ever excavating waters eat away the obstruction until she thus "polkas" into deep water, and on she tears for other like mishaps; but these do not appear to injure the steamboats, which have an interior framing to which the engines are fixed, and which framing distributes the weight of the engines over fully one-third of her length, at the same time adding immense strength to the hull. The chief objection I noticed in these steamboats and cargo barges, is that their bows are too bluff for economically navigating a rapid river like the Indus. The entry of these vessels should be sharp, and then swell into compensating beam, thence terminating in a lean run aft; this would make them steer well also. The barges are horribly faulty in this respect, as might be seen by the bank of water piled against their bows when being towed. With a fine entry like our Bombay cotton boats, short keel, fine run aft; and overhanging ends like them, with plenty of beam, they would carry more cotton than they do now, and be towed at half the power at present expended.

The native pilots are relieved every five or six hours, by picking up the relieving men who stand ready on the bank to be taken on board. It was strange and puzzling to see, that although both banks of the river looked equally fertile, yet on the right bank are nearly all the towns and villages visible from the deck.

At 8 A. M. on the 21st November we ran alongside the deep water bunder of Kotree, had our breakfast, and having bidden a hearty and sincere farewell to excellent Captain Fleming and his attentive officers, we crossed the steamer's gang-plank, ascended the river bank, and there we found the Scinde Railway terminus close at hand, with six miles of railway sidings to work the river-side traffic; of this there were busy indications in the number of boats on the river, which having brought cargoes hundreds of miles down the Indus and her tributaries, were then discharging them into the railway trucks.

The native cargo boats are strange, rude made vessels, steered by a long protruding oar over the stern; these boats, without a drawing, are beyond description. They come down the river from Mooltan in about twenty days, but they require six months to go back against the flood current: this is in the low-river season. In the high floods they don't attempt it. Freight for cotton from Mooltan to Kotree by steamboat and rail is from one to four rupees per Indian maund of 82 lbs., according to demand for getting it in the market for sale. This is for the freight

brought by the Railway Company's steamboats down the river, but for the cotton from Kotree (brought by native boats) the railway charge for conveyance to Kurrachee is for unpressed Rs. 6-7 per maund, and for pressed cotton Rs. 4-4. These are stiff rates, but they are freely paid. There are three or four hotels at Kotree, but we did not enter them, having recently breakfasted on board, and the train being about to start.

At last we are off for Kurrachee (105 miles). I give distances where I can, as for years I was under the impression that it only required a canal three or four miles long to connect the Indus with Kurrachee habour! I need not say that this trip quickly dispelled the illusive project; yet higher up the river there is a canal which has been made over a great part of the distance, but it would be a perilous proceeding to lead the silt-laden waters of the Indus into Kurrachee harbour, for when the waters of the river met the inflowing ocean tide the result would be that the harbour would be choked up in a month. The country on each side of the railway looks, in its garb of sand and lime-stone hills, desolate in the extreme. In some parts of the way it is a confused jumble of barren light-colored hills, until we reach Mulliar, within about 12 miles of Kurrachee, where Mr. John Fleming has an experimental farm, which is an oasis of emerald green, plenty, and beauty, showing rich crops of cereals, whilst the luscious sugar-canes towered twelve feet high. This has all been created by an abundant supply of water near the sand-stone surface, through which it forces its way from a large and inexhaustible water basin below, and from which source the good folks of Kurrachee (who at present have to use unwholesome water) intend at some fortunate period to conduct their future supply through pipes; before doing so let me take the liberty to advise them to have the soil, through which the pipes are to be led, chemically tested, for nitre, which, if there, would soon destroy their cast iron pipes. When about four miles from Kurrachee, the before-time sweet smelling sea breeze became laden with a strong odour of sea weed and mud. Our fellow passengers, the FRIENDS, said it was a smell of the sea! I shall allude to this in my letter on the harbour of Kurrachee, which is distant from the European quarter of the town three miles, and where we duly arrived at 5 o'clock in the evening, tired, but jolly.

The stations along the line were mostly temporary ones, but were laid out in a more commodious manner, and with more taste, than those on the Great Indian Peninsula Railway; and the fencing, where executed, precluded the very chance of stray

cattle getting on the line. Truth compels me to say that when I visited Kurrachee the hotels were not creditable to her. They are mostly kept by adventurous European foreigners, who appear to delight in having a lot of their do-nothing, loafing fellow-countrymen at their table, whose society is neither pleasant nor edifying—charges Rs.5 per day, but with a willing zeal to copy Bombay in that particular; I dare say they are now Rs.6.

TOM CRINGLE.

March 25th, 1864.

KURRACHEE AND ITS HARBOUR.

No. XXIV.

Of the town of Kurrachee little need be said more than it appears to be well laid out as to roads, which is almost everything in a new city. It has a few very creditable public buildings, but with her superb geographical position she can afford to *wait* and bide her time. Her future prosperity is certain.

The following will give the reader some faint idea of the Trade of Kurrachee, especially in its progressive increase:—

	Imports.	*Exports.*	*Total.*
1843.....	£121,000	£1,010	£122,000
1847.....	287,000	154,000	441,000
1851.....	489,000	244,000	733,000
1854.....	629,000	604,000	1,233,000

For 1864 it is expected that the Exports and Imports will reach over four millions owing to the large quantity of cotton and wool exported in that year. With a population of one million and a half, a very large share of the commercial prosperity of Scinde, its railway, education, libraries in all large towns, public buildings, spacious and well laid out roads, sanitary rules, harbour bunders, besides a hundred other measures which a good ruler will push along, are chiefly due to our present excellent Governor of Bombay, Sir Bartle Frere, C.B. whilst he was, for several years, Commissioner of Scinde. And it was not his fault that Kurrachee harbour is not now equal to that of Bombay; he found the money, but the devil found Engineers. Many of my Bombay

friends many think I am overrating the future greatness and adaptativeness of Kurrachee harbour; but I have only to point out that screw pile wharfs can be made close to the present shore, alongside of which ships could lie and discharge their cargoes direct into railway waggons, which are already at the harbour side. Bombay, owing to its rocky shore, cannot do this; and thus, to her cargo boats will always be a retarding, and an expensive necessity.

The Scinde Railway locomotive works at Kurrachee are admirably planned and executed. I have seen none in India at all approaching them. Order and good arrangement is apparent everywhere. There is also a very pretty and well-stocked library attached to the works which does the Department infinite credit. The works were executed under their Chief Engineer, Mr. Brunton. The buildings for the goods station are only temporary, yet they contain the germ of a well concocted plan, and are laid out on a good principle for working traffic. Here may be seen long parallel unbroken lines, each capable of containing fifty waggons. Alongside the lines of railway are stacks divided off, with cart-road lanes 60 feet broad between, for taking away consignments. By this sensible arrangement each merchant's goods are placed separately in the stacks, which are all numbered, and thus a mis-delivery of goods is next to impossible. I am referring to the "inward" side, but the "outward" is managed in the same sensible manner. When an engineer lays out a railway goods depôt, and does not construct it on such an obviously practical plan as that at Kurrachee, we must ascribe the omission to crass incapacity, showing a want of broad views for future requirements?

The Kurrachee church is a very pretty and commodious one, with good acoustic properties. It is built of drab coloured close-grained sandstone, in the Norman Gothic style, but to which its steeple does not appear to belong, having more of the Italian campanile in its composition than would appear to accord with the style of the body of the church. Its height is about 170 feet, arrived at by taking every step from its base to the summit at one foot, which is what they are. The square of it does not appear to be in proportion to its height, and it thus looks lean and *chimney-stacky*. The church was built by one of the East India Company's engineers, and there was evidently great artistic labour bestowed upon it—a labour which had to be taught piece by piece to the workmen. It possesses some good decorative stone carving; and all the arches of the windows are in open gothic trellis-work. The pulpit, reading-desk, and altar-

screen are of open carved gothic tracery, in white sandstone, of which the whole church is built. Strange to say, its lightning conductor of iron is fastened down the steeple wall with iron brackets, in contact with the rod, without the least attempt to insulate the latter.

Kurrachee will never be so healthy as it might be made until the mud flat on the east of the NAPIER MOLE is filled up, and until the inhabitants get good water; pipes should be laid down to bring the fine pure water from the Mullair river, 12 miles distant. If the gradient is sufficient to allow the water to find its way to Kurrachee by gravitation, it would save the expense of an engine to pump it over a ∩ stack to give it pressure. In the first instance the pipes should only be half the diameter the future wants of the town would be likely to require: thus if a 15-inch pipe were laid down now, another the same size could be laid down in future years alongside the first, and then should one of the mains burst at any time there would be the other to fall back upon until the damage had been made good. There are *papier machie* pipes now made in France which are said to bear a greater pressure than cast iron. They are not liable to breakage in transit carriage, and nitrous soil has no effect on them. The Kurrachians should ascertain whether nitre exists in the soil through which the pipes would have to be laid, and if so, and it should be decided to have cast iron pipes, they should undergo a special and thorough protective process to guard them from being eaten through. It is with this view I give the hint about the *papier machie* pipes. They were tried about six years ago in London, before a large body of engineers, and bore the enormous pressure of 500 lbs. to the square inch. When I mention that some of our mains in Bombay have burst by *one-third* of that pressure, their enormous strength will be apparent to all. I merely mention this as a hint, but I do not know whether the patent has been brought into practical use.

Kurrachee has a rich soil for arboricultural purposes, which only requires to be tickled with rillets of water to make it laugh with a harvest of floral beauty. Trees will keep her soil cool and pleasant, and when they shall become abundant Kurrachee may possibly register annually 10 inches more rain than she does at present. My object is not so much to attempt a minute description of the town of Kurrachee, of which I know little, as to draw attention to her harbour, whereon her coming greatness hangs. I estimate an exalted future for this port; not second even to Bombay. Let us view her splendid geographical position as

the key of Scinde and the Punjaub, and it must be admitted that Kurrachee is to India what Alexandria is to Egypt; nay more, it is the gateway leading to a larger and richer delta, traversed by a railway, which, when joined to the two end portions now open, will enable us to pour an army on to the future battlefield of India whereon to maintain our supremacy against the long-talked-of Russian invader, should he come. If we view Kurrachee as a commercial port its future promise is bright in the extreme. Let the vast plains of the Punjaub and the fertile delta of the Indus become thronged with agriculturists, and then with two thousand miles of river carriage and a railway extending to Lahore and Umritsur to bring its produce to it for shipment, its future greatness could not be over-estimated. It is also our nearest port to England, and its splendid position will be yet further enhanced when the Euphrates valley line shall be an accomplished fact as it undoubtedly will be. With these important advantages in view, is it not to be regretted that the harbour of Kurrachee has not long ago been improved by removing the sand-bar at its entrance? I am aware that £238,000 have already been spent in useless efforts to remove the bar, but I hope to prove that the expenditure has been misdirected, so much so as to have left the bar with two feet less water over it than it had before the money had been wasted; whereas had it been spent in *straightening* the harbour, cutting off and diverting all the creeks and monsoon water gullies which pour their sand-laden streams into it at deflecting angles, causing shoals in the best part of the anchorage; and had the pestiferous mud flat, which when dry at low water forms a fever-bed of malaria, and in emptying its diurnal ebb waters at right angles into the harbour, causes the nest of shoals which now infest it, a part of the money expended in filling in this stinking place would have been well spent, and the town would now have been one of the healthiest in India. A strong masonry bund should be placed across the upper end of the harbour, leaving about a mile of the head of it behind the bund. This space, if excavated, would afford good reclaiming material to raise the muddy foreshores on each side, and thus destroy the cholera beds of mud, nearly wholly composed of decayed marine vegetable matter. A space thus bunded off as a *back*-water could be filled through its large and numerous sluice-gates on the flood, and at half ebb the released waters would form a *straight* and consequently efficient scour to carry out of the harbour any silt which may enter with the flood tide. Compare this plan with the cross current scour hoped for from the pestiferous mud flat

above referred to. It was the stench of the decayed seaweed from this fever hole which the FRIENDS scented when on the railway four miles from Kurrachee, who truly enough said it smelt of the sea! The engineer who recommended the construction of a screw-pile roadway to Keamari on the east side of the Napier Mole—through which sluices are made to admit the daily tide over the mud flat already alluded to, and the ebb tide from which pours into the harbour at right angles—quite lost sight of that ever truthful fact of his profession, that "deflected currents *always* produce shoals," and a glance at a map of the harbour will at once show that in this case there is no exception. Had the £150,000 spent on this piled roadway (which by the way is only 40 feet wide, not half enough to serve the whole commerce of the port) been spent in filling up this fever-giving marsh, and cutting off every creek and gully which did not form a veritable *back* water; and had the east groyne been made so as to align more with the direct straightness of the harbour, and had Deep Water Point been removed, the harbour would now have been free of shoals in its anchorage. Let any one read my remarks on the deflections from side to side of the Indus where *every deflection causes a shoal to form* with unvarying certainty. Yet the Engineer employed by the Home Government has done the very same thing by placing the east groyne at too great an angle across the harbour mouth, with a view to wash away the bar; but owing to the deflected current its action would appear to have increased it.

But strange to say, the formation *cause* of the bar appears to have been quite overlooked. A glance at the map will shew that the bar has been created, and is now fed by a continual flow of sand from the Beloochistan coast round MUNORA POINT. And although the engineer has drawn a groyne on his plan of harbour improvements, yet it is now, at the eleventh hour, proposed to be made as a *break-water* to prevent the S. W. monsoon gales from launching a sea on to the bar, and with a view of shielding ships from broken water when crossing it, which is a very good reason for making it; but he has made no sign yet of having proposed this work with a view of at once cutting off the evil from which the bar is fed. I now hope to adduce facts, which will, I think, convince any impartial man that had a groyne been run out from Munora Point in a S. E. direction in the first instance, the bar of Kurrachee harbour would, long ago, have gradually but *surely* disappeared, for the groyne would have guided into deep water the flow of sand, which, from north-west of Kurrachee to Cape Comorin, is always travelling to the south

along the beach, and along the beach *only*, as the off-shore *is invariably a mud bottom.* A groyne thus placed will perform the same service for the Kurrachee bar as the S. W. Prong does for Bombay harbour, where, if the rocky prong did not exist, there would be a sand-bar harbour in a month. Many, even professional men, think that because they see a large sand beach or spit on the opposite shore to where the bar is fed from, that currents or other causes exist to convey sand from the opposite point of the compass to where the sand-flow is alleged to proceed from. I noticed this apparent effect at several places on the Malabar Coast, especially at Cochin and Goa; at the former place the southern sand spit runs out so as to even overlap the tongue of the bar, yet a glance at the map of either place will convince the most sceptical that the sand-flow is along the beach from north to south. The southern overlap of a sand-bar is caused by the flood tide having a contracted entrance into the harbour. Convey the north flow of the sand into deep water and the south spit will disappear, because the bar proper will not be near to feed it. I will now proceed with my illustrative facts.

KURRACHEE HARBOUR.—A year and a half ago I came down the Indus from Mooltan to Kotree, and passed over to Kurrachee to see its harbour. I had never seen either map or chart of the place, so knew nothing of its history so far as the work of engineers had been exercised on its harbour bar, to render the port available for ships of large tonnage. It was a pleasant surprise for me to find the harbour nearly straight from its entrance, and extending back some five miles. From enquiries made, I found that its fatal entrance bar of sand still existed, and that the skill of the engineers employed on it for the past five years have, after spending vast sums of money, resulted in there being two feet less water on the bar than existed two years before, that is to say there was only 17 feet 6 inches in place of 19 feet 7 inches.

I took the liberty of speaking to H. E. Sir Bartle Frere, C. B., Governor of Bombay, as to my firm conviction that the beach sand drift is ever on the move down the Mekran Coast, round Munora Point, thence along our western shores, and down the Malabar Coast. He replied, that as the engineer was coming out by the next overland mail, he wished I would talk the matter over with him. I did so, pointing out the cause and true remedy as related here, but the engineer in question was not of the same opinion as myself, and did not think the formation of the bar was due to sand drifted round Manora Point. As a non-professional, I could not reply, so bade him good day, with

a parting hint to look into the matter again. A month afterwards he came down to Bombay from Kurrachee to go to England, when he admitted that he thought I was right about the formation of the bar, and that he should recommend the erection of the groyne directly he arrived in England. I am willing to stake my existence on its success, and on the entire disappearance of the bar when the groyne is made.

I will now give some instances where groynes have had the effect of intercepting beach drifts, the same as here described, and which are identically applicable to the Kurrachee Bar.

It is necessary first to state that the material which clothes sea beaches is invariably laid on the shore from one particular quarter. Thus, the sand which so infests the shores of Western India, invariably comes from the north or north-westerly, according to the trend of the shore line; on the other hand, the shingle which clothes the shores of Kent, about Dungeness, unmistakeably comes from the west. I have seen a S.W. gale lay millions of tons of shingle on that coast in one tide, but let the wind change to the eastward, without necessarily blowing hard, and every stone would be eaten off the beach as clean as a swept floor. Where it originally came from, or afterwards went to, or will come from again, no one can tell. I will now point out two or three instances, which came within my personal knowledge, as to the value of groynes in preventing harbour mouths from being choaked up.

Folkstone Harbour, in 1842, was so utterly filled with shingle that a small fishing boat could only get along by the inner-pier wall in a small channel which was kept open by a rain-fall back sluice which used to be opened into the harbour at low water. This filling up was caused by the finer shingle being washed round the pier head, which, although placed at right angles to trap the shingle, had, in the long course of years, got filled up in the angle, and then the harbour began to fill. Read the sequel: one day a short elderly gentleman, dressed in knee-breeches, and black silk stockings, with a hat the brim of which approached to *friendly* broadness, came down from London, got the pier owners together, and in less than an hour bought Folkstone harbour for £18,000; the purchaser being no other than Mr. Cubitt, the great contractor, subsequently Lord Mayor of London. In less than a week a big gap was made in the east pier, a railway laid into the harbour, and 500 navvies at work clearing it out, which was done in a month.

The groyne end of the west pier was then built out fifty yards further, which thoroughly arrested the flow of shingle into

the harbour. In three months from the time the harbour changed hands passenger clipper steamboats, in connection with the South Eastern Railway, were running to French ports out of this before-time, neglected place ; a branch line of railway from the trunk line was in course of construction down to the harbour ; crescents of houses were being erected on the cliffs ; new streets were being made out of old ones ; merchant ships of 800 tons came loaded into the harbour which so short a time before could not float anything larger than a lugger. And all this magic prosperity was due to the brain of one thinking man, who knew that by pushing a simple groyne out to trap the shingle, he could entirely alter the aspect of affairs. No bottle logs and scientific twaddle was put forward to prove that which in all cases relating to marine engineering is incapable of proof—the spade and pick, guided by a little common sense, solved all the mystery there was in it.

Dover Harbour, for long, long years used to be choked up at its mouth by a bar of shingle, which, when the wind had been blowing hard from the S.W., used to block up the entrance. The Harbour Commissioners spent many thousands of pounds (through the influence of the Duke of Wellington, then Lord Warden of the Cinque Ports,) in trying to cure it, by making a larger backwater, but without effect, further than the appearance of the pier walls, &c., were improved : the bar still remained, until it would please an easterly wind occasionally to remove it. This state of things continued until the progress of the South Eastern Railway along under the chalk cliffs to the westward of Dover, required that the Round Down Cliff (immediately to the west of Shakspeare's Cliff) should be blasted down ; this was done with eighty barrels of gunpowder which were exploded by a galvanic battery, but not the faintest sound was heard, nor a trace of smoke seen when the charge was fired. On the fall of the giant cliff its debris rolled out to sea, in wave-like undulations, pushing the waters before it as if itself had been liquid. It was the most strange and weird-like sight I have ever seen, that mountain of chalk, sinking down (with a flag flying on a large Flagstaff erected on its emerald green summit) as intact and compact as a Datchet meadow, until it crumbled up at the base of the cliff, and was impelled by the forces, which set such a mighty mass in motion, in chalk waves for a quarter mile into the sea. This was blown down because a shoulder of the base projected so as to be in the way of carrying the railway by it into the tunnels of Shakspeare's Cliff, and not because it was foreseen it would benefit Dover Harbour. But it proved itself

to be a large groyne, which so effectually shut off the passage of the shingle to the eastward, that, in a little time, the Harbour of Dover was quite clear, but the railway terminus was by the same cause so denuded of the shingle which protected its sea front when the station was built, that upon a heavy gale setting on shore from the S. W., the Terminus was partially destroyed from the want of the protective beach in its front. I merely mention this to show how effectually the beach was arrested by the blown down chalk groyne. However hurtful this may have been for the railway, the harbour was effectually cured of having its entrance barred with shingle. I could fill a book with instances of the beneficial agency of groynes in preserving forts and buildings on the sea shore by arresting sand or shingle, so as to form, either a bank on which the fury of the sea shall spend its force, or to arrest sea debris from forming bars across harbour mouths.

Mahim Harbour, in which, nearly within the memory of living men, ships of 800 tons burthen were built and launched, is now choked with sand; and this sand, being white, cannot be the disintegrated product of trap and basalt rocks, washed down by the rivers, which drain Central India, and which debouche on the Western Coast. The same white sand runs along by Worlee, and Malabar Hill, the point of which it turns; a portion is driven in by the tide through the two small openings of the reef which extends in a straight line from the lighthouse to Malabar Point, and coats the floor and beach of Back Bay, the main drift passing on, to be intercepted by the base of the S. W. prong at the Bombay light-house, thence conducted by the prong to the S. W., and (happily for Bombay harbour) dispersed in deep water at its termination, whence it is carried by the action of the tides and the force of the monsoon gales on to the shores of Malabar.

Bombay Harbour.—A glance at the map of this harbour will at once show, by referring to soundings, the dispersion of the sand at the end of the prong (as above related), and by the sandy formation of the Thull Shoal on a base of jagged rocks to the south-east. If the S. W. prong were removed, Bombay would have a sand-bar harbour in a month. With these conclusive facts before us, all first efforts to render navigable the sand-bar harbours, from Kurrachee to Cape Comorin, should be the construction of groynes on their north side to intercept, and guide into deep water, this sand-drift along the beach. And such groynes should be constructed as to guide in as straight a course as possible the river or other backwater connected with the harbour,

so that the ebb current may meet the sea at a converging angle whence the monsoon gales blow, in order that the action of both forces will tend to scour the sand southwards. I do not think that the existing magnitude of sand bars should deter engineers in the task of removal. Help and guide the ebb scouring waters, cut off the feed of sand, and what are now formidable shoals, would disappear immediately. They are like drunkards—stop the grog, (i. e. sand)—and the evil (sand-bars) will cease. Not a penny should be allowed for dredging bars. The labour of SISYPHUS would be a trifle to it and with the same hopeless result. Above all, no attempt should be made to make a groyne in a direction to face the monsoon sea. The outlet should be sought as much to the southward, away from the prevailing winds as possible, even by giving the groyne a very gentle curve if there be deep water in that direction, so that the angle at which the monsoon sea strikes the end of the groyne, and at which the ebb current from the harbour meets it, should, if possible, form the apex of a triangle as acute as it is possible to make it.

GOA has the most beautiful harbour in the world, but for the want of a sand-conducting groyne run out from Aguador Head, it is cursed with a sand bar. It should be understood that all the sand bars which block the entrance to harbours on the Malabar Coast have their bases, or the point from which they are fed, invariably to the northwards, their southern, or terminating point being very finely tapered off, the whole shape of all those I have seen being singularly like that of a neat's tongue.

COCHIN HARBOUR is also a lovely place, it being a circular bay of 20 miles, with water so deep within 40 feet of the shore along the town, that a line-of-battle ship could lay alongside. The entrance into this fine bay is cursed with a like sand bar, within which and leading into the bay there is 36 feet water on a fine mud bottom. £30,000 would remove this bar into deep water, and thus give a fine harbour to this coast, which is harbourless from the ever recurring sand bars. Let me have for one month the company of the greatest sceptic as to the formation and cure of these sand bars, to view the mouths of rivers and harbours along the coasts of western India, and I warrant he will agree with what I have already said on the subject.

To return to Kurrachee harbour. I think it is greatly to be regretted that Mr. Parkes did not visit the adjacent, and Malabar coasts before he had spent such a large sum as £238,000 with the unsatisfying result of having made the harbour worse than when he undertook its cure; had he done this he would, I think, have impressed on the Government the

imperative necessity of making the groyne from Munora Point in the first instance. It has now to be done at an additional expense of £126,000, but the future will prove that it will be the only step yet taken in the right direction; not as a *breakwater*, but as a sand-drift conducting groyne. If, in lieu of the vast number of surveys made of the harbour, and the elaborate theoretic science displayed on trying to prove things nearly if not totally incapable of proof, a few timber groynes had been put down on the sand beaches east and west of the harbour mouth, it could have been made a *certainty* as to where the sand came from which feeds the bar; whereas it does not appear that this fact is yet known to Mr. Parkes, the engineer in charge of the work, who is now going to exhibit the anomaly of making a groyne for a *breakwater* which is not required, yet, unknown to himself, it is the only act which will restore his credit as a harbour engineer! The Bombay Government engineer appears to be in an equally doubtful state of mind as to where the sand flow comes from. The east groyne, now reported to be doing mischief, will cease to do so when the Munora groyne cuts off the supply of sand, which now feeds the bar, but great caution should, I think, be used in carrying it out a foot further than it is at present, lest it should trap the sand, which the proposed Munora groyne will conduct into deep water. I propose the Munora groyne not as a break-water to shelter ships, or to prevent the sea breaking on the bar, but for a more cogent and imperative reason, viz., to conduct the sand, which feeds the bar round Munora Point, into deep water, when it will travel down the coast towards Bombay.

DEEP WATER POINT is the most objectionable feature in the harbour, and which, from its salient position, and current deflecting power, evidently produces sand shoals, both in the anchorage, and to seaward of its own position. But I fearlessly assert *that all these shoals, together with the bar which feed them, and which bar itself is fed by the ocean beach drift round Munora Point*, will disappear as fast as the groyne is run out. It will be found that the above is the true solution of this very simple affair. In coming down the Indus I dwelt particularly on the crescent shaped curves which occur from side to side of the river; there is always deep water close to the shore in the bight of the curve, and at its lower horn where the current is finally deflected there is formed a shoal, or a series of shoals, on the down current side. Now look at the map of Kurrachee harbour, and see the crescent curve on the west side of Munora Point, where the deep water reaches close up to the sandy beach,

and where the point deflects the N. W. current, and leaves the usual shoal, the bar, exactly as I have described the same process in the Indus. The deep water (18 to 21 feet) close to the beach on the west side of Munora Point is, I assert, an incontestable proof of a north-westerly current from the Persian Gulf setting to the S. E. round Munora Point; if the current set in the opposite direction, there would, owing to the salient position of Munora Point, be shoals formed on its N. W. side, where now there is 27 to 30 feet of water. I write this from the pure love I have for subjects of this nature, and of doing all I can for Kurrachee, as I can see a glorious future for her; I have never spoken to, or know, any one connected with the harbour works except the few words to Mr. Parkes, as related, and I can therefore have no personal interest in the matter. Not being a professional engineer I should not be allowed to give an opinion; I therefore write on this subject with plain freedom, knowing that my views will pass unheeded; but the day will come when it will be seen that I was right, and I now triumphantly point to the S. W. Prong at Bombay, which kindly Nature made, and which is now doing the identical work which a groyne carried into deep water would do for the harbour of Kurrachee, and I will further say that the engineers connected with Kurrachee harbour works should blush at their ignorance, and feel ashamed of themselves at not taking the hint long ago. In conclusion, I would now humbly advise the Government to appoint a commission of suitable persons, both engineers and naval officers, including two captains from the Indus Flotilla. This commission should take a trip up and down the Indus, inspect its numerous mouths and the direction of its sand drifts along the shore; take soundings on the off shore to ascertain whether they are of sand or mud; they should order small timber groins to be erected on the sand beach between the mouths of the Indus and Kurrachee harbour, and also to the west of Munora Point, which would unerringly show the direction of the beach sand drift. The commission should then visit the principal ports on the Malabar coast from Allepee, south of Cochin, to Cape Monze N. W. of Kurrachee, and note the sand bars of the various harbours and rivers, and from which direction they are fed. They should ascend some of the rivers to observe, that although they drain granite rock districts, they contain none of the *white* sand which blocks up their mouths, and lines the beach on either side. The commission should then lay their report before Government, to whom it could not fail to be a valuable guide in all that relates to the sand bars which shut out the free navigation of our rivers on the Western coast of India.

We left Kurrachee on the 24th November in a fine well-found steamer of the same name, belonging to the British India Steam Navigation Company, commanded by Captain Cottier, who kept a good table, and was always very kind and obliging to his passengers. On arriving in Bombay on the 27th November, I had to buckle to at heaps of hard work, which must always accumulate when the head of a department is away.

TOM CRINGLE.

Bombay, 24th July 1864.

BOMBAY TO PENANG.

No. XXV.

Four months' continual severe office work soon told upon my health, which was debilitated by fourteen years' hard work in India, and my medical attendant ordered me a more extended leave from office duties than I had taken during my trip to Calcutta and the North-West Provinces. Having a constitution that acquires renewed health, in even reputed sickly places, by mere change of scene, I determined to direct my steps to Java *via* Galle, Penang, and Singapore. I accordingly left Bombay in the *Emeu* on the 14th April 1864. From the day we left Bombay till we arrived in Singapore, my cabin port was not once closed. Captain Eastley, by his good, sound sense, and urbanity of disposition, makes a friend of every one who knows him. The chief officer, Mr. Breeze, has managed to take to sea a very passable band of musicians who play every night to willing dancers, amongst whom he is second to none ; in fact, he is the life and soul of the ship—ever catering amusement for the passengers, besides keeping the ship clean as a new pin. I never saw a ship make such true landfalls—true as a beeline, yet she is an iron vessel, subject to all those aberrations of the compass which, to those who don't know thoroughly how to allow for its variations, have caused the loss of many fine ships. We reached Penang on the 28th April, just after they had had heavy falls of rain, which had spread a mantle of green grass over her soil, and which had turned on the full power of the

Water-fall. There is no place in the Eastern hemisphere which I would select before Penang for introducing a stranger fresh from Europe, with the object of feasting his eyes on Eastern scenery. The nearest idea I can give you as to the position of the range of hills which surround nearly one half of the Island, is to imagine a fan open with its butt, or handle, pointing to about E.S.E. at the landing-place. The extreme edge of the fan would then represent the range of hills, the loftiest of which is, at a guess, about 1,800 feet high ; all the rest is flat plain under cultivation. On the summit of the highest hill is the Governor's country residence, but I am told he seldom resides there now, and that respectable people, seeking a change of air, can hire it for periods not longer than fourteen days. Here is every variety of the palm family growing in the most prolific profusion, together with the Bread-fruit, Jack, Mango, Almond, Nutmeg, Mangosteen, Rambosteen, and the Casuarina trees, which latter, in the moist soil of the Straits Settlements, attain a giant size, and form a distinguishing feature in the redundant flora of these islands. Although I was exceedingly weak, I went ashore for a drive to the water-fall, five miles distant. A Chinese sanpan, pulled by one Chinaman standing, with a pair of very tough, light sculls, in the after part of the boat, with his face to the bow, and in which direction the passengers also seat themselves, soon puts you ashore. They are pulled with twice the speed of the clumsy Bombay dingy. After driving past hundreds of pretty, clean European villas, embeded in profuse tropical vegetation, we reached the Alexandra Hotel, where is a reading-room, and where all the finest fruits in season can be had at nominal prices, to say nothing of all the strange drinks which cosmopolitans from every part of the world have made popular. The house is beautifully ventilated, and has for its manager, Mr. Boniface, a very obliging man. I was indebted to him for ten mangosteens—the only ripe ones on the island. The Water-fall is visited for its baths as much as anything. By diverting one of the mountain torrents, and excavating baths on terraces one above another, a series have been made, such as the private family bath, plunge and swimming bath, native bath, &c., in addition to which there are large marble-lined baths for ladies. After refreshing ourselves we started for the Falls, half a mile distant. All my strong fellow-passengers rushed up the hill, but owing to the sun and my weakness I was incapable of doing so. After, however, sitting alone for a while, I hit on a scheme for ascending the hill ; I got my driver to take his hardy little pony out of the shigram ; when, taking off all his

harness except the collar and traces, I made the reins fast to the ends of the latter, put the bight of the reins over my hips, and folding my arms *à la Napoleon* at St. Helena, I ascended paths, as steep as one in three, leading to the first fall, without the least exertion. In descending, I was at first at a loss how to ease myself down-hill: at last I hit on the happy expedient of leading the pony's tail between his legs, and holding on to it; the pony was forced to adopt a slow and cautious pace, which I humbly shared with him. The falls are hardly worth visiting, but by so doing one can see how extremely dense the jungle trees grow in a country like this, where, all the year round, there is frequent rain. If our Bombay folk could only see the capital public conveyances there are in all the Straits Settlements, they would at once join in importing some of them into Bombay to displace their own dirty buggies. At Penang you obtain a light spring shigram to hold four and the driver, who runs alongside for short distances, or rides on the shafts behind the pony, which is a wee thing about twelve hands high, but which will drag his load at eight miles an hour with such an untiring, hearty willingness that he becomes the wonder of all who witness his performance. His food is nothing but the coarsest of green grass, and a modicum of rice padi in the husk. These hardy little animals would run a Bombay buggy horse to death, and laugh at it. The fare for hiring is only one dollar per day, and in proportion for short distances.

Penang is so pretty, neat, and clean, that she might be worn set in a breast-pin! I sailed out of this port from 1821 to 1823 for the suppression of Malay piracy. In those days the European population must have been far below what it is now, if we judge by the vast increase in the number of bungalows, and yet the number of ships now in harbour is far lower, and of inferior burthen to what were here in 1821, in which year there were thirteen men-of-war, four large East Indiamen, and a large number of "Free Traders" (as country ships were then called), besides a host of Chinese junks, Malay praos, &c. If any Penang readers should see this, it may interest them to know that in the cruel war between the Siamese and the Quedah people, the former fought with such inveterate and devastating hatred as to hunt the Quedah king and as many of his subjects as could escape, to Penang. The Siamese then had the impudence to send a hundred war-boats into Penang harbour, within gun-shot of the town, and threaten to land and take the king by force, if he was not at once given up. It was a sight to see our gallant 12-gun brig *Nautilus* run down to them with guns shotted,

and under a fine topgallant-breeze at Pry Point, and having ranged up abreast of the Siamese commodore, told him, through our interpreter, to weigh and leave the harbour instantly, or prepare for action. I suspect the commodore had read *Hudebras*, as he gave the signal for his fleet to weigh *ek dum*.

Whilst on this, to me, familiar ground, I must relate an adventure which befel me here:—In 1821 A.D., I belonged to the 12-gun brig *Nautilus*, then employed in the suppression of Malayan piracy in the Eastern Archipelago; but at the particular time mentioned we were engaged in saving the fugitive subjects of the king of Quedah from cruel onslaughts of the Siamese. During a lull of this duty we ran over to the small group of islands called the Brothers, situated to the east of the northern entrance to Penang. The largest of the islands is famous for its turtle, and a boat having been ordered to proceed one night to catch some of the rich green chelonia, so dear to aldermanic palates, I, after considerable importunity to our first lieutenant, obtained permission to form one of the cutter's crew, composed of six stout sailors and myself — then a lad of fourteen years; for the chance of meeting pirates on the island, we all went armed with cutlass and pistol, as was always the custom in Malayan waters when boats left the ship. After taking in a keg of water, and a boat's tarpauling, we pushed off at 10 P. M. on a lowering night. A two hours' pull brought us to the island, and having run the boat on a fine sandy beach, we landed, and after taking the arms on shore, I, as the youngster of the boat, was ordered to anchor her about fifty yards out, and remain in her as boat-keeper. This was like turning an alderman from the table when the luscious calipee were ready to be served. I pleaded with the officer in charge that I came to see turtle-catching, not to mind the boat—a very stale occupation to a ship-boy with two years' sea service. So after a great deal of deferential battling against my being excluded from the coming sport, it was decreed that I was to anchor the boat well out, and then if I chose I might swim on shore, and see the fun of turning slippery turtle. In less time than it took Adam to take off his fig-leaf, I doffed my thin frock and trousers, leaped into the boat, pushed off from the beach, and anchored her as instructed. As there are lots of sharks in that neighbourhood, I did not like to display my white skin as a tempting bait for them in the sea, nearly always very luminous with phosphorescent matter. So I sat on the boat's thwart debating whether I should enjoy safety and solitude where I then was, or dare the chances of John Shark, and so enjoy the new sport I had come to see; I soon decided by taking a long spring

from the gunwale into the aqueous jungle of the shark, and with my face half-buried in the water made for the beach with long, hand-over-hand stretches practised by fast swimmers over short distances; at last I touched the welcome sand, got on my legs, gave two or three vigorous strides, and was on the dry sand, near my clothes. But I was horrified to find that I had really been chased by a shark, and which, in coming with hungry eagerness to snap me up, had nearly landed himself on the beach, but after some walloping about he got off. I called to the men to come and see him; but all I got was a threatened slap on my head, and a stern command to "hold my jaw, and not frighten the turtle." So I dressed and went to sit down with the men behind a little bank of drift-bush, so as not to be seen by the turtle when they came above high-water mark to deposit their eggs.

Boy-like I wanted to talk of the shark and my narrow escape; but received a whispered hissing command to "shut my gab." Thus we sat for one mortal hour like monks of a Trappist monastery; when suddenly our look-out man gave a long hu-s-h-h-h as if we had been talking as loud and long as Charles Mathews in "Clatter *vs.* Patter." Without saying a word he then began to creep along on all-fours towards the water's edge, we all following in single file like dogs on a trail. Having reached the water he turned to the right, we still following in the same order, and when abreast of the main body of the turtle we uprose and rushed in quick, though still silently; but silent as we had been the turtle had heard us, and we met them scuttling towards the sea. Now is the time for order and discipline; if each one thinks he can, single-handed, turn a 3 cwt. scuttling turtle he will soon find out his mistake. Our men were ordered, when we closed in, to go to work three in a gang, whilst I was to step in with my little muscles to give the casting turn according as my aid might be required. Oh, what fun to fill the hands with dry sand and run up to a big fellow, and after two or three slippery failures, turn him on his back, in which position he is perfectly *hors-de-combat!* Sharp as we were, we only could turn five, but these were ample for our wants. Then every tongue wagged loud, and made up for the previously imposed silence. Pipes were filled and lighted—a dram of arrack was served out to each, under the stimulating effects of which the men sat down, and fought over again their turtle-turning battles. Then at last came the unwelcome command, 'boy, fetch the boat in,' I pleaded the fact of the shark keeping watch and ward over her, but was called a young fool; and—feeling very valiant themselves under the joint influence of arrack and tobacco—they asked if I was afraid?—when, as they had not the task to do, I knew they

were not; they were bold by proxy—*and grog;* it ended (like all other debates, against the weaker side) that I must swim out and fetch in the boat; and to encourage me I suppose, they all went to the spot where we had landed, when, on looking seaward, we were not a little startled to find that the boat had disappeared! Here was a fix. Some would have it that the Malays had come in a canoe and cut her grapnel rope so as to let her drift down with the breeze, when we should fall an easy prey to them in the morning. At last one of our party in stooping down to look along the surface of the water, thought he saw a black line; we all had a look, and the summing up was 'boat found;' so seeing no help for it, and having as great a dread of being taunted with showing the 'white feather' as I had of the chance of meeting—what is happily called—the tiger of the sea, I now crept gently into the water, and swam as silently as I could until I reached the boat, which I found swamped level with the wash of the water; but the pleasure with which I adroitly rolled my saved body into her will never fade from my memory! A horror of sharks has, ever since that eventful night, caused me never to give them another chance. I have since followed up the fresh 'pug' of a tiger unarmed, except with a short boar spear; so it is not from want of courage; but what can a poor defenceless man do in the water in battling with a shark! And I now also feel that I should disgrace my manhood by forcing a task like they did on me—a mere child, in whose tender years men should not expect to find the physical courage of manhood. However, to finish my story. When I got into the boat I could see by the action of the water heaving and surging its phosphorus light through the plug-hole, that, through the rolling of the boat, the 'piggen' wherewith she is freed of water, had knocked the plug out, and thus the boat had become swamped. In vain I hunted in the water for the lost plug but at last found a young pike-fish, which I remembered having leaped into the boat just before we landed—a common occurrence in those seas, which are alive with fish—whose head just fitted the plug-hole. I then got the boat's tarpauling, and laying one edge well over the gunwale I dipped the part I held in my hand into the water in the boat, and thus heaved over as much as I could lift each time. In a few minutes, I had half cleared her; I then weighed the grapnel, shoved the boat in, when all hands soon cleared her of water, got the turtle into the boat, and the wind being fair, we up sail and soon ran down to our ship. Thus ended my adventure.

In after years, when reading of the pumping flood engines used in some parts of Lincolnshire, I bethought me of my *tarpauling pump;* so I made a drawing of a long deep iron shoot

with a very large valve bottom, the end of the spout bolted on a loose hinge pivot on the side of the dyke to which the water was to be emptied. The other end of the spout was raised and lowered by the piston-rod direct from the cylinder, which in itself could be adjusted on a frame in accordance with the height of the flood waters. Thus its down stroke would sink the spout, when its valve bottom would fly up, and so allow the spout to be immersed easily, and the up stroke would lift the spout, cause the valve to close, and empty two tons of water at a time. I sent it to a scientific journal, to the editor of which I told the boat-baling incident of my boyhood: "it was a great credit to me but—it was already in use!" That was the first and last effort I ever made at fishing for a patent.

The Province of Wellesley is under the government of Penang; it is a narrow strip on the mainland of the Malay Peninsula, directly opposite to Penang, thirty-two miles long, and varying in breadth from thirteen miles to somewhat less than four miles, the narrowest part being opposite to the town of Penang. When I knew it forty-three years ago, it was a wild jungle, inhabited by the tiger and crocodile; now, it is under high cultivation, and has 64,000 inhabitants. Large quantities of sugar and rum are made here.

There is now only one Governor for the Straits Settlements, whose head-quarters are at Singapore. Penang and Malacca are each governed by Resident Members of Council. Colonel Macpherson, R.E., the Resident Member of Council of Penang, bears a high character for affability, good administrative abilities, and high professional attainments, and especially as an architect; of which more anon, when we get to Singapore. I paid a visit to the *Penang Gazette*, where I was very kindly received by its manager. Mr. J. R. Logan, its talented editor, was out when I called, but he sent a polite note on board for me, accompanied with some statistical books of great labour and value, of his own compilation.

I found Tom Cringle was known here. On the day I called at the *Penang Gazette* office they had inserted my description of the Ball on board H. M. S. *Severn*.

We left Penang on the 28th April, at 8 P.M., for Singapore, of which more in my next. I here consulted Dr. Scott, a physician of high reputation, from whose skill I found myself in a fair way of recovery, but I was yet a mere shadow of my former self, and was excessively nervous and weak.

June 12th, 1864. TOM CRINGLE.

SINGAPORE.

No. XXVI.

We arrived here on the 30th April after a thirty-seven hours' run from Penang, in the P. and O. Co.'s good ship *Emeu*, Captain Eastly, and a better ship or captain I never sailed in or with. The last time I was in Singapore was in 1821, at which time it was a mere fishing village, and I do not recollect that it then had one pucka-built house. Now it rivals Bombay in its public buildings, and quite equals it in the commodiousness of its merchants' offices, excels it in the palatial style of its hotels, and extent of roads. But it owes much of its superiority in roads to convict labour.

I will, however, say something about its harbour, which is a deep bay, enclosed in a sweep of land to about three-fourths of a circle, with the town lying in the bottom of the bay. On the north side is a small detached island where ships can careen. Docks are about to be built. A little on the south side of the pocket of the bay is a small river navigable for cargo-boats for eight miles, but for smaller craft to a much greater distance. It is this little river which has had a large share in administering to the vast commercial prosperity of the place. The mouth of this river is protected by batteries; there is also an intrenched battery and barracks on the top of a hill immediately at the base of the town, on which is the mail signal-staff and night-light, for a clear entrance-guide into the bay. While I was at Singapore, there were in the roadstead generally about forty square-rigged sailing vessels and ten steamers. The batteries I have mentioned are about to be abandoned for other sites not likely to draw an enemy's fire on the town as those under reference would do. Let us get back to the river, the banks of which, of slimy mud on my first visit, are now defined by substantial retaining walls, at intervals in which are wide flights of steps where the cargo-boats discharge their lading into the godowns of the merchants along the river-bank. Thus, this little useful stream does for Singapore what a canal does for Batavia, but which has cost the Dutch millions of guilders to make and embank—of which more anon. A mile still further south, the bay of Singapore is pierced by a deep water-passage called New Harbour. This passage leading out from the bay into the Straits of Malacca, exhibits the most romantic scenery, and the steamer runs at one time so close under the cliff of a hill that you could pitch a biscuit ashore. Some of the hills are clothed with trees, from the summit to the

water's edge ; others are quite bare of trees, and planted with pine-apples, acre upon acre, till the spectator wonders who is to eat them. What tons of saccharine matter they must draw from the breast of mother earth! These hills are nearly of a uniform height of 100 feet, and they all more or less contain snug little boat coves. These set me thinking, what if this romantic passage existed within an hours's run of London, and I owned all these hills : I should have no difficulty in letting them on building leases. What yatching there would be! What steam-boats full of admiring Cockneys on holidays! What new Cremornes and tea-gardens! As it is, you see no life on them but a pig-tailed Chinaman or two at work among their pineries. But near the north end of the passage, on the western side, is a more busy scene. It is here where the various steam-boat companies have their wharves and coaling-stations, where the largest steamers can make fast alongside the shore, with the white gleaming coral plainly seen beneath the clear pelucid ocean water. The P. and O. Company has the best wharf. Close to, and opposite, is their agent's upper-storied office ; on the south of which adjoins their large coal-sheds, in which are stowed with the most studied neatness, some 20,000 tons of coals. Opposite the sheds are the wharves, alongside which the coal ships lie, and discharge their cargoes direct into the sheds, and where their steam-boats take in fresh supplies of coal. The whole of the premises and the surrounding yard is a picture of care and neatness, under their agent, W. Macauly, Esq., our old Bombay acquaintance, who was such a universal favorite with every one who transacted business with him. His friends will be glad to learn from me that he looks the healthiest man in Singapore, and he don't look a day older than he did ten years ago.

It has been suggested that in the event of war, the whole mercantile marine of the port might lay in New Harbour in defiance of an enemy's fleet. This may be a good plan enough when the entrances to the Strait are defended by powerful batteries; otherwise, at present, two frigates might go into the Strait, with the wind northerly, and by setting fire to one end of the crowded mass of shipping, burn every one of them. Singapore, being a free port, has only a little chowky-looking place for a custom-house, and that even I never saw unlocked. Besides the mercantile houses along the banks of the river, there is a large place called Mercantile Square, around which are established all the principal houses of general business, and which the river pretty nearly separates from the private part,

which lies on the north, or left bank. The communication across the river is by a wrought-iron box-girder bridge, which spans from side to side without intermediate support. The distance from bank to bank is only about 100 feet; and whilst I was there in 1864, a wooden lattice-bridge, partly supported on piles, was opened for foot-passengers. The distance here from bank to bank is about 200 feet. If they had got good bridge sole-pieces of teak of great length from Moulmein, and made the lattice-work fuller, the engineer might have given a navigable space of 100 feet in the centre, in lieu of about 40 feet as at present. The bridge was much wanted, as it saves foot-passengers a mile roundabout walk, or the hiring of a boat, to get to business haunts; but it is poorly designed, and worse built. I am glad to say that our Bombay carpenters are far better workmen than any I have yet seen in these parts. I think they may possibly owe this to the good ship-building, the furniture-makers and the fancy inlaid workers serving as examples of neat and true work. I know that the making of railway stock has had a most marked influence on them for strong, yet exact work. The Malay of the lower classes is a cheerful, often a merry fellow, but I think he is stupid, and am sure he is lazy. The Chinese coolies will work like mad if you give them piece-work. They are the best labourers I have yet seen in the East.

The most conspicuous of the public buildings is the new Town Hall, built close to the entrance of the river. It is in the Italian style, and has a most imposing appearance notwithstanding that the style is totally unsuited to this climate of fiery sun and beating squalls of rain. Its front is recessed back by advancing the side wings; the back face is flush with the entrance on the east side, where, to shut out the blinding sun and rain, a galvanized iron sloping portico or verandah has been put up. I got a peep through the Venetian doors of the principal hall, the ceiling of which was being decorated with considerable taste in compartments, with gilded pine-apples at the intersections of the squares. Near it is the Court-house, but which possesses no architectural feature. In front of these two buildings is a long enclosed strip of Esplanade facing, and close to the sea beach; it is a quarter of a mile long and one hundred yards broad, with a road on each side—that on the east following the curve of the bay, while the western road gives access to the hotels and other buildings which abut on this road. Among these is the Gothic Episcopalian Church of St. Andrew. The architect and builder is Colonel Macpherson, R.E., then Executive Engineer of the

Straits Settlements, but who is now resident member of the Council of Penang (which means governor). If he had done no other service than the designing and building of this church, he would have well deserved the distinction of having left an imprint of usefulness to his generation. I very much regret that I am not architect enough to do justice to this fine building, and shall content myself by saying that it is admired by every one as a church of pure Gothic. The interior is decorated with a very fine stained glass window in the apse. The tops of all the other windows are of stained glass also. The seats are unique, being made as benches, yet with armed seats. The steeple struck me as being wanting in altitude, which on enquiry I found to be the case. Its proportions were justly designed, but as it grew in altitude towards completion it was discovered that the foundations would not stand any additional weight, and was finished rather abruptly. In this, I think, the builder erred. He might have framed in teak the additional height required, and covered it with lead, like the dome of St. Paul's. If I do not err, the church was built chiefly by convict labour, and cost £16,000.

Hotels are plentiful here, but their cookery is so filthy, oily, and greasy, that a man may starve before he touches a bit that is put before him. I put up at the Esperance Hotel, where I found this abominable cookery. The rooms are all nicely furnished, and the beds, although hard as a stone, are all very clean. I paid for the rooms four dollars a day, and my stay of twenty days produced a bill of 100 dollars less a few cents. This did not include board or wine. Although the charges are high for everything, the accounts are kept with scrupulous exactness and honesty. In a word, they don't follow the practice of *double entry*. This hotel has a stock-farm for the supply of their table, but I don't think it can be well-attended to, as the meat, with a few exceptions, is anything but good. The reader must understand that these lands, "refreshed by frequent showers," and covered with green grass, cannot rear stock, and all (Ceylon, Penang, Malacca, Singapore, Java) have to import their bullocks and sheep. What is wanting in Singapore is an hotel where our countrymen can get their meals without being poisoned with grease in every dish put upon the table.

The climate of Singapore is stamped on the features of the European inhabitants, except in those mysterious constitutions we see some men gifted with—men, who the sicklier the climate the rosier they look. The thermometer is rarely above 82°, often below it, yet the air feels very depressing. On one occasion I nearly fainted from mere atmospherical depression; but it is

right, I should say, that I was suffering from great debility before I reached Singapore. I shall be better understood in respect to its climate if I say no sick man should seek it with a view to restoring his health. Nearly all the town of Singapore is built on a sea-beach, capped with a little vegetable mould. All the monied classes live a little way in the country on the summit of small cone-shaped hills with just room enough to put a bungalow with stables in the hollow. Nature in one of her strangest freaks, has sprinkled these little green islands all around for miles out of Singapore. I call them islands because I feel confident that at no very distant period these eminences *were* really islands, with the sea running between them where the roads are now made through the threading narrow valleys which separate them. The bungalows thus built on the summit of these breezy eminences look very neat, clean, and nicely painted, and what gives them quite an English look of cosy comfort is the way they are enclosed by well-trimmed bamboo hedges, which rivals our hawthorn hedges at home, in its dense compactness. When I say bamboo, I mean a sort of reed bamboo which grows here with great vigour. It is strange that I have not seen it in Java, although having a climate seemingly identical. I mentioned in my last letter from Singapore, (which, I think, must have miscarried) that I had not seen any kites—I have since seen three—but no crows. Thus the old distich,—

Sparrows and crows,
Scotchmen and Jews,
Are in all parts of the world,—

fails when applied to Singapore.

The public conveyances do Singapore much credit—they consist of shigrams drawn by the fast and hardy little Pegu ponies. You can hire them for a whole day for a dollar, or for short trips at corresponding rates. Boats here are the same as those I wrote of as plying at Penang, rowed by Chinese. There is also a long, thin, wedge-shaped boat manned by Malays, with a cadjan roof for sitters, but these, although safe enough for seamen, are somewhat dangerous for ladies, should any menacing danger alarm them. They are crank under sail, although the Malays appear always to escape coming to grief in them.

I sent on through Mr. Macauly, agent of the P. and O. Company, to the Victoria Central Museum, a large model of a Malay War Prahu, which I hope has been duly received. We leave for Java to-morrow.

TOM CRINGLE.

Singapore, June 20th, 1864.

BATAVIA.

No. XXVII.

I arrived here on the 24th June, in the Dutch mail-steamer *Konigsen*, Captain Lewis, a first-rate man, (an English-man,) who has sailed in these seas for thirty-two years. The vessel is rather slow, but very comfortable.

THE DUTCH PEOPLE.—I like them very much, individually. They are totally without arrogance or pride towards their inferiors; and are affable and courteous to strangers. Their children are frank, modest, and generally very pretty and clean-limbed. The most beautiful child I ever saw was Catharina Frederica, daughter of Herr Binnendyk, the Director of the world-famous Botanical Gardens of Buitenzorg Java. She was about 9 years of age, and when seen for the first time, one felt struck back as it were for a moment by this flash of beauty. She is the creation of a poet's dream! Her sweet face beamed with one effulgence of beauty, made up of modesty, great frankness, angelic innocence, and Norman blue eyes, which will stamp her future with the courage of a Maid of Orleans should the occasion arise. Flaxen hair, with a tinge of gold in it, when lighted up by the sun's rays, coral lips, plump, and as delicately coloured as the red coral when fresh plucked from the ocean bed. Her form promised robust strength, and she had the most finely moulded limbs I ever saw. I have seen mothers put down their own children to rush forward impulsively to kiss her, at which time she was seen to great advantage with her beautiful eyes beaming with pleased wonder as to what it was all about! We became great friends, and she was my daily companion in many a pleasant walk through the gardens. She had three sisters nearly as beautiful as herself.

The Dutch have a very healthy practice of walking out for exercise morning and evening with wives and children, all bare-headed; so customary is it to go about thus, where practicable, that people never take head-coverings to places of amusement. I adopted the custom with great comfort. Men and boys wear the hair nearly close cropped, with few exceptions. The practice looks repulsive to a stranger at first, but he soon gets reconciled to it from the coolness afforded to the head in washing. While here I wore my hair dressed *à la Cold Bath Fields!*

The Dutch people here delight in wearing *deshabille* from early morning till even past noon. This consists, for ladies, of a dark coloured native sarong wrapped round the waist, something like

the Indian saree, only not so full and graceful, the sarong being wrapped rather tightly, as is the Malay custom. The body is covered by a white calico bed-gown reaching to the knees, and with the hair flowing loose on the shoulders. The ladies say they find this dress very comfortable. The men wear full pyjamas of the same patterns as the ladies' sarongs, and a similar bedgown, only a trifle shorter. English ladies also wear this morning costume when out holiday-making in the country, but, as a friend remarked to me with great truth, it is not pretty, and although it might be tolerated till 8 or 9 o'clock (they are all early risers in Java) a neat woman should then be dressed in the costume of her country. I was recruiting my health at an hotel forty miles from Batavia, where I found a whole covey of our pretty countrywomen, whose society I liked very much: every word and action with them was frank and honest: the Dutch appeared to have rasped off that crusty coat of reserve which we English like to exhibit to strangers. In these ladies, and in their husbands, also, when they could leave their mercantile affairs and run away for a day or so, everything was sociably cheerful.

The Dutch are a very social and pleasure-seeking people in Java. They support an opera, theatre, concerts, and patronize all importers of novelties in the way of amusement, fully up to their merit. I would not advise any professional singers or fiddlers to visit Java, as they cannot appreciate the one, and they have abundance of their own music. All their operatic music is performed in a finished style by volunteer amateur performers. It is strange that I scarce ever heard the notes of a pianoforte from the houses as I pass them in the evening. They affect great taste in music, but I do not think they indulge in it much in their domestic circles. I was too weak and ill to accept invitations, or I might possibly have found myself mistaken.

By-the-bye, there are two things I have not yet seen in Java—a Dutch child whose hair curled, or a rat; and I have only seen two crows.

Military.—I do not think I ever saw such a preponderance of young men as form the greater number of the Dutch officers. They are a very gentlemanly, social set; and are always cheerful and communicative wherever you meet them. They are, nearly without exception, the best set-up men I have seen in the commissioned ranks; a handsome plain undress blue uniform, with a double gold cord from the left shoulder, leading across the breast under the right arm and across the back to the same shoulder, where it is terminated by two gold tassels hanging in front, sets them off to great advantage. This undress appears to

be common to all ranks of officers. The composition of the Dutch Indian army is curious from the admission of low-caste natives into the European ranks. The Dutch, I can see, are politically a very jealous nation in ruling their Indian possessions, and they no doubt find their plans answer very well. The European is always shown to the natives as a *master*, and as one to be respected. If a detachment of native soldiers are sent on any duty, I have always noticed an European non-commissioned in command of it, if an officer was not with it. I was surprised to see some of the soldiers as fully decorated with medals as are ours after having just passed through the Crimean and Indian wars. But they often have hard fighting with revolting Rajahs, of whom they have hundreds under their sway; and the whole of these Eastern islands are so densely wooded that the native element in their armies must be invaluable for bush-ranging in jungle fights. All the cavalry and horse artillery are mounted on strong Javanese ponies, of about twelve hands high. The same description draw their six-pounders, six to each gun. Horses do not thrive here without the greatest care and precaution, glanders being very rife among them. The country pony is fed on padi in the husk (soaked for twenty-four hours previously) together with rank green grass; an over-feed of the latter is sure to kill a horse; while the padi, if given unsoaked, will ferment in the stomach and cause colic, which is often fatal. Such forage as dry hay, oats, or gram cannot be obtained at any price. A friend of mine lost a valuable Australian mare through her eating her green bedding at night. The Java pony stalls are all boarded a foot from the ground, and no litter is used. Nearly all carriages are drawn by one pair of ponies; posting is done with four and sometimes six, according to the number of sitters and weight of travelling carriage, and they can with their six mile stages run at the rate of from eleven to twelve or thirteen miles an hour. The military ride in hussar saddles —legs straight down from the crutch. To a person who has seen our splendid artillery in India, it is very droll to see a Dutch squadron mounted on Lilliputian nags twelve hands high. One peculiarity in their word of command will interest military readers, and probably make them laugh at its useless oddity. In the English army we only give the word *march* to put bodies of troops in motion, but the Dutch use it for every change of pace; for instance, if they are trotting, and a change to a walk is desired, they would say, "At a walk, *mar-r-r-r-r-ch!*" I argued the point with some of their officers, contending that by giving the simple word "Walk," the same object is obtained. But no; they

attach great value to the fact, that by their system they get a warning of what is intended to be done, when the word *mar-r-r-r-r-ch* becomes the executive command. The proportion of Europeans to natives is one company to each battalion; and of the artillery five Europeans to each gun, the remainder being natives. The drivers are all natives. The Europeans are said to be recruited from all the nations on the Continent, and the natives are drawn from so many islands and nooks and corners of the Dutch possessions, as to make it next to a certainty that they will not combine against the Government for political purposes; besides, they are recruited from the humblest of the native classes, and their position is materially improved by becoming soldiers.

The Dutch have built their barracks in all the towns I have been in, in a very guarded manner, the barracks being in centres of large squares, which are faced with pretty and commodious semi-detached houses for the officers; where they cannot build houses they run a canal round, like a fort ditch. This system may afford time for troops to resist treacherous attacks, but I think it increases their death-roll from want of fresh air. They have generally a perverse love of building the floors of their houses on a level with the soil, and ventilation is a myth to them. In most of their houses they have high glazed windows, but in lieu of making the upper sash moveable for ventilative purposes, it is immoveably screwed fast. Their house carpentry is bad, for everywhere I saw beams and joists fixed on unscientific principles, so as not to obtain the full resistive strain of timber due to the cubic contents employed. To return to military matters. The Europeans in the Dutch army here, are, with few exceptions, the most ill-made and the worst set-up soldiers I ever saw—long crane necks, sloping shoulders, hollow chests, and high backs; the legs swing about as if they did not belong to the body—in a word, mere food for powder. On parade they march badly and without precision. The mounted branch ride with the legs straight down; chin, knee, and instep in a line. The officers are the smartest and youngest I have seen, and nearly all of them show good blood. One rarely ever sees a middle-aged officer anywhere. They have sub-officers who rise from the ranks, and rank above the non-commissioned officers; after serving a certain probation they are promoted to the commissioned rank. They look a very respectable class of young men do these sub-officers. All colonial service, whether civil, military, or naval, reckons double, which may account for an absence of aged officers, as they go home early on pensions.

I think the climate of the Dutch possessions in the Eastern Archipelago far healthier than British India. My. thermometer is down at night to 74 deg., and does not get above 80 deg. in the middle of the day. Liver complaint is nearly unknown. Batavia is hotter than Soerabaya; whilst Samarang is hotter still; but their extreme heat does not reach that of Bombay. The Dutch are always at schnapps and bitters, and smoking cigars. They say we drink brandy, which soon gives liver complaint, and deranges the system. All the Dutch look very healthy at Soerabaya, although it is rare to see any ruddy complexions except in young officers fresh from Holland. I have been much struck with a physiological feature of the Dutch, and which I notice in many of the Germans, viz., a want of prominence and squareness in the chin. I see many fine, manly features quite marred by a soft, feminine, receding chin, which is really remarkable. I have never heard of this peculiarity being noticed by any writer, but that it is so I am certain. On the other hand, Nature appears to have been very liberal, as with the French, in giving them (phrenologically speaking) large organs of destructiveness. The Dutch rule over the natives is very mild and paternal, but let a native Rajah rebel or a native citizen transgress the law, and the Government puts a *steel* thumb on them which is never afterwards forgotten by either the punished or the punisher. The Government maxim is, "live like obedient subjects, or dread my vengeance for disturbing the peace."

THE NATIVES.—It is said that until a few years back the Dutch used to govern their native subjects with a tight hand. They now exact the labour of one day in seven from every native male adult. This enables them to keep their roads, leading all through the interior from end to end of Java, as trim as a garden walk and in good repair; the natives find their own ordinary tools. It is this system which enables the Dutch to keep up that extreme neatness of their main thoroughfares and great public squares. All rank herbage is cut down, the turf straight-trimmed at the roadsides; not a leaf falls from their hundreds of miles of double rows of roadside trees but what is swept up daily. All stable manure, or other household litter and dirt, is either deposited late at night, or very early in the morning, outside the various compounds, when, at 6 o'clock in the morning, carts come along and take it away, generally to boats on the numerous canals, by which it is conveyed to fields or vegetable gardens abutting on them. The labouring population are now allowed to bask in the sun of idleness as much as they

please. They wont work except for very high wages, two days' pay of which will keep them in idleness for a week, the provisions they delight in being both cheap and nutritious, and of which the ingenious Chinese are the principal purveyors. I yesterday saw some two hundred loafing idle natives in the bazar, gazing in a crowd at three paper kites up in the air! You could tell at a glance that these men had not been, nor intended to labour that day. I have known them demand a rupee and a half a day to go to a little hard work, and then stipulated for an advance before they would set to. You are never certain of them continuing their labour, as they leave work with surprising regularity. Sometimes the cook of an hotel will put down his ladle and be off to spend a few idle days. To keep their servants from this habit, the hotels and other large establishments (and small ones too for that matter) build huts in their compounds for their families to live in. The Dutch inhabitants groan under this state of the labour market, and erroneously think (as I am sure they do) that in British India we coerce labour into productive channels, sigh for our (imaginary) system, or for a return to their own old system of forced labour for a fair wage. I am not referring to the forced labour incorporated with their culture system, without which I am afraid there would be very little culture anywhere in Java. It is all very well for liberalists to say that labour should not be coerced; but let them come here and see how the theory works when put to the practical test! Only for the numerous Chinese in Java, who form the handicraftsmen, vegetable gardeners, and porters of the island, everything in the way of manual labour, in the cause of commerce, would have come to a dead lock. A despotic hand should be laid on lazy men of the labouring population; any man found without a master for the day should be forced to labour that day for the Government for nothing—a sure cure this!

The Police.—The severe usage which defaulters receive in the police chokies causes many felonious out-stretched hand to be withdrawn empty; property is very safe, except the little business done by hotel servants, and where suspicion is spread over many heads. In Batavia the servants of the Java hotel at which I stayed, are well looked after, and I found them very honest; but at the Java hotel, Soerabaya, the landlady had recently lost her husband by cholera, which, I suppose, caused the servants to infringe the laws of *meum* and *tuum*, and lots of petty pilferings took place. The police force is much feared by the natives. That of Batavia is very bad both in the prevention, punishment, or detection of crime. The facts which I now relate came under

my own knowledge, and may be depended on. At the hotel I staid at, an English gentleman had an English groom, who turned out a drunken, quarrelsome fellow, and in one of his drunken fits he broke the arm of my groom, in the most wanton manner, just above the wrist. The police were sent for, who came, looked at the culprit, and the poor fellow, his victim; they went away, saying they must see the Resident before they could act. What that functionary said to them, I know not, but they never troubled themselves further in the matter. Another instance:—My Bombay servant and a Lucknow man, servant to an English gentleman, very foolishly went into the Chinese quarter at evening, when they were insulted by some "roughs" in the bazaar, and in resenting it (I suppose more by the tongue than the fist), the police marched them off to an obscure chokie, where they had been confined two days before I could learn what had become of them, although I had applied to the Assistant Resident myself, saying that I was about to leave two days afterwards, and felt anxious to recover my servant. He told me that no report of their capture had been made to the head-office. In the end they were discovered by mere accident; but the police would not let them go until I went on board the steamer, to which they were conveyed by the police, manacled like murderous felons, although they took no notice of the real felon who broke my horsekeeper's arm. To show their want of skill in detecting crime, the following will exemplify:—A merchant's house was broken into at night, himself seized and gagged, and cash to the amount of Rs. 5,000 stolen. He was a Frenchman, I believe, but neither the thieves nor the money were discovered. As they wore crape masks they were supposed to be soldiers in garrison. In Socrabaya two or three old coats were stolen from the hotel, but the police, who are very active there, soon recovered them, but failed to recover a large silver neck chain which was filched from my servant, and which was the pride of his heart.

Dutch Government.—Two hundred years ago, when the English used to fight those tough old sea-battles with the Dutch, there was no great disparity between the two nations. But what a gap British enterprise has created since that period in developing her manifold and vast resources, and in attaining national power and position! In that comparative short space of time, we have not only realised vast riches and pushed our commerce into every corner of the globe, but we have peopled two nations, and have established numerous colonies besides. The last of these is the free port of Singapore, which is a rankling thorn in the side of Batavia, in drawing from her the profit and shipment of the raw

produce of the Eastern Archipelago, which is carried to Singapore in small coasting crafts which know not the tread of the Custom-house officer. In the harbour of the latter place is always thirty or forty sailing ships and eight or ten steamers, whereas Batavia mustered about fourteen vessels, all told, when I visited it in May 1864. Whilst the Dutch admire our enterprise, they fear to imitate us, especially in all that relates to free trade. They cannot understand how we become rich and powerful by establishing free ports without exacting (like themselves) heavy duties—many of them differential. Java for the Dutch, is their motto. They appear not to perceive that it is from small beginnings commerce takes her mighty strides. Not so with us: a savage sends us a gum which serves for a century to erase pencil-marks, but a Macintosh discovers a solvent that renders it of world-wide service. A surgeon, in the dense woods of the Malayan Archipelago, observes in the hands of another savage a block of another kind of gum, sends it to be dealt with by the motor mind of Britain, who turned it to a thousand useful purposes, its crowning merit serving as an impermeable insulator to our thought-communicator,—the electric telegraph wire. The kite-string of Franklin taught us to guide lightning. The deep-thinking mind of Germany first raised the index finger pointing to the use of the electric telegraph; again the motor mind of Britons turned the *thought* into a world-wide utility. Laying a wire across a creek at Plymouth led the way to the bold design of wire-speaking across almost fathomless oceans. A child playing with a piece of glass resulted in Lord Rosse's giant telescope. A drift-log in the Atlantic directed Columbus to a continent where the Pilgrim Fathers found rest from persecution, and increased to a great nation, now our best commercial customer. Our Raleigh brings home from this land what was then considered a vile plant; this vile plant now yields a revenue of six millions sterling. Cook discovered a land of which we could not for long afterwards make better use than as a penal settlement for convicts; men of purer metal were amalgamated with this base alloy,—the result is a colony now rivalling the proportions of a large nation, which now sends us millions of pounds of fine wool, and millions sterling of fine gold. Wedgewood saw a farrier apply a little calcined flint to the eye of a horse,—his suggestive mind made it result in our being the porcelain makers for the world. A merchant sends an English lady a pound of tea, which, from ignorance of its use, was boiled like cabbage; this same herb now yields a revenue of over six millions sterling. Brooke, a sick man, goes in his yacht and conquers a Raj in the

territories of which he discovers a mine of antimony: a metal most valuable to the arts, and rather scarce. Mr. Smith, of Kent, invented the Archimedean screw, which now propels our steamships to all parts of the globe. A Stephenson, with horny hands, ascends from the depths of a coal mine and invented man's slave,—the locomotive steam engine; then he invented the iron threads for it to run on and bind the world together in commercial amity and self-interest—the foe of wars. The Dutch, however, appear to prefer to go plodding along in quite the old fashion.

RAILWAYS.—In May last they turned the first sod of a portion of a line at Samarang, which is eventually to run the whole length of Java. The line is being made by a Government guarantee of five per cent. A portion of thirty-six miles which will ultimately form a portion of the through trunk line, is being surveyed between Batavia and Buitenzorg, the country-seat of the Governor-General.

TOM CRINGLE.

July 26th, 1864.

BUITENZORG.

No. XXVIII.

Buitenzorg, thirty-nine miles from Batavia, and 800 feet higher, is to the Batavians what Matheran and Poonah are to the Bombayites—a place to which they can run away from the cares of office, from epidemics, or to recover lost health. It is here that the Governor-General of the Netherlands India has his palace. But here also are the world-famous botanical gardens. I was surprised to learn that Sir Stamford Raffles started the idea of these gardens, to carry out which he enclosed about 100 acres; in the centre he built the palace, which at first had an upper story, but a few years ago a severe earthquake so shook the building that the upper story had to be taken off. As the plinth was originally about ten feet from the surface of the ground, the palace now looks a very imposing pile. Its style is nearer Doric than any other, but like many buildings erected years ago

in India, it partakes of all styles except the Gothic, which, by-the-bye, would have looked better than any other, from the palace being surrounded with woods. Its form is an advanced centre, the front of which forms a grand reception hall, with two wings. It has a cupola, which admits light to the great audience chamber; the floors are of polished marble, whilst the interior pillars for supporting the roof are whitened over with common chunam, without even a bit of gum or glue to fix it. One chamber is hung with the portraits of all the Governors-General, but they are quite unworthy of the nation, both in size, execution, and framing. There are some fine heads among them, but when the massive, noble features of the present ruler is added to the group, I am mistaken if it does not eclipse the others who have preceded him. In the verandah close to the Governor-General's apartments are several fine talking birds; among them I had the rare opportunity of seeing a living bird of paradise, and a splendid creature it looked, as it flew from side to side of its cage. I hear that one enterprising man has succeeded in safely taking a pair of these to England, *and thus secured the promised reward from Queen Victoria of* £5,000! (I was told £50,000, but in charity I have allowed a cipher to drop for error). The front of the palace is laid out in a lawn garden; the best feature of which is the green closely-cut turf and a large sheet of water beyond, covered with flowering white and pink water-lilies. There is also a vista road planted with trees on each side, one mile long, forming an approach to the palace, at the farther end of which is an obelisk and the national coat of arms, guarded by the Belgian Lion (none of which have been dethroned since they so shabbily separated themselves from Holland) springing from an elevated plinth. The whole looks imposing, no doubt, to the natives, but stucco and white-wash don't take a high standing in the Fine Arts. The gardens at the back of the palace are enclosed for a park, in which are a great number and variety of the deer tribe. Nothing could excel the judgment with which the ground was selected, composing the 100 acres in which the botanical garden, palace, and deer-park are laid out. It is a ridge elevated sixty or seventy feet above a small river which bounds it on the E.S.E.; on the other side it is flanked by the public road leading from the capital, beyond which is another river. A brook has been diverted some distance up the country so as to come through the chief portion of the native town, and is led in a gushing torrent, on to the highest level of the gardens, whence it flows into the lake in front of the palace, watering the garden, where required, in its course. On the S.E.

side of the lake, the ground drops down suddenly, some 80 feet, where a large pond, with fountain, has been made, fed from the lake above. In this pond was a glorious "Victoria Regium" in full flower. I noticed that in the morning the flower is snow-white, but in the evening it changes to pink—changing back to white again in the morning. Its gigantic leaves, with their edges turned up, would form a boat for a child to float in. The young leaves are crimped and puckered all over so that it may have space to expand as it grows older; as it ceases to grow in size it begins to decay at the edges, and thus gradually wastes away to give place to younger ones. Close to the fountain is a circular aviary for cockatoos and parrots, both very fine birds, and great favorites with the children.

I much regret that my utter ignorance of botany does not enable me to describe the very complete manner in which the Botanical Garden is laid out, with its thousands of trees gathered from every corner of the globe, and here planted in pairs, in classified groups; every group having its class name on a long narrow board, and every tree or shrub having a white-painted stake at its foot, with its botanical name painted on it in black letters. One wonders who could have had so much patience to paint so many names! I am not sure though whether a light copper holder, with its face glazed, into which to slide the printed card bearing the botanical name of the tree, would not, in the end, be far more economical and neater. If any one thinks he has seen all the palm family, let him come here and go wild with wonder at their endless variety and great difference in attitude, form, &c. Some are like ordinary lofty thin-trunked trees, but look up seventy feet high, and you behold a gorgeous coronal of palm-leaves. Here are gigantic Caoutchouc trees, sixty feet in the circumference of their Banian-tree-like trunks: break any of the rope-like mass which forms the trunk, and the milk oozes out the same as from our Indian milk-bush. Hold the palm of the hand, catch a few drops, and work it about with a pen-knife; in a minute it is an elastic cord of great strength and tenacity. I noticed one beautiful peculiarity in many of the trees, which is that the young spring-wood, when first formed, is of the most lovely pink, bordering on to other deeper shades until it assumes a beautiful green, but so fresh, and so much purer than the colour of the older leaves, that it looks like innocent childhood perched on the hoary head of tainted age. Alas! for the dear old cherished tales of our childhood! How we all believed that the fatal Upas tree (only that single one in the whole world!) stood in a blasted valley in this very island of Java—how that

the Dutch used to pardon gallows criminals on condition that, with the head and face clothed in a hideous leathern mask, with large glass goggles to see through, they went across this valley of the shadow of death, forty miles in diameter, in the midst of which stood the solitary Upas tree, to gather its poison, which was so baneful as to kill the very birds which flew, as well as animals which went near it. Its trunk was strewn with a rampart of human skeletons of those who had fallen dead when about to tap its fatal trunk for its poison juice. If the criminal accomplished his errand, he was a free man, and one to be looked on with wonder and awe! How vividly this wonderfully absurd story of childhood flashed on me as the assistant-director led the way under the shade of a magnificent row of these trees 100 yards long! I think not less than two acres of the gardens are devoted to creeping plants alone, which are all arranged in lines, and trained on the trunks of the quick-growing Bender tree, which has all its own branches and leaves lopped off, and thus forms a living prop to train creepers on. The Dutch plant the silk cotton tree along their lines of telegraph to hang the wires on; and I have even seen a buttress prop stuck in the ground, and notched into the tree on which the wire was hung, and there take root and graft itself to the tree at the other end. I have not observed one manufactured post used here for supporting telegraph wires, and I have often thought it would be worth while for the railways and the Government in India to imitate the Dutch in so obvious a substitute; in fact, I often thought this desirable object was easily attainable before I visited Java. Every tree in the gardens has a circular clearance six foot diameter made around its trunk, within this circle are every morning deposited the dead leaves from the trees —every tree its own leaves. The bamboo group has been planted in opposite and intersecting rows, and having grown so that each row leans over the opposite one, they now form cathedral-like roofs, which are impressively grand and imposing. The bamboo grows in Java with wild and profuse magnificence; and as you walk outside the clumps I have attempted to describe, they look like an ordinary forest group of bamboo, but when you step through an unpretending opening, and witness the solemn gloom and the aisle-like arches intersecting each other overhead, the scene is religiously solemn and grand. To my pleased surprise, I found that this had been selected, no doubt owing to the same feeling, as the last resting-place of many. Several very pretty tombs were grouped together under these natural arches, among which is that of a Governor-General, and Captain J. Drury, R.N., with many others. Close to the south entrance-gate of

the gardens, is a memorial pedestal, within a small open dome, supported on pillars, bearing the following inscription :—

Sacred to the memory of
OLIVIA MARIANNE,
Wife of Thomas Stanford Raffles,
Lieutenant-Governor
of Java and its dependencies,
who died at Buitenzorg
on November 26th, 1814.

This, however, is not her tomb, for she was buried at Batavia.

The grand drive is from the south to the north entrance-gates, along a road forty feet wide, three-quarters of a mile long, and planted with a tall, magnificent row of trees, bearing a plum-colored fruit, in shape like a large long blue grape, and which is said to yield a good oil for domestic purposes. Whilst I was there, the fruit was hanging in rich clusters, but, as far as I could learn, it was not eaten, nor even gathered for its oil. With such a vast collection of creeping plants I was surprised to find not more than one or two in flower, until from enquiries made I learnt that very few flower owing to want of sunshine, the sun being during my stay of twelve days very often obscured by clouds; rain is very frequent even in what is called their fine season. The thermometer is generally down to 76 deg. in the night, and seldom mounts higher in the middle of the day, than 84 deg. in their hot season; but, in fact, except from local causes, Java cannot be said to have much change of temperature, while the high volcanic mountains—some in action—in many parts of Java, have great influence in causing atmospheric disturbance and rain at unexpected periods of the year. I, at first, thought that the gardens did not possess a "Bougainvillea," which flowers so beautifully in the gardens of India, but on minute inquiry I found they had it, but it never flowers with them, which is no doubt owing to the cause described above, together with the excessive moisture of the climate. I recommended the superintendent of the gardens to plant it on a raised bank, in an open position, where it would get all the sun and dry air possible, and not too much moisture from the earth. One of the most handsome trees in the gardens is a native of Calcutta. It is conspicuous for its compact shape, full leaf, and beautiful long pendacles of a bright scarlet, which attract willing attention, when one catches a glimpse of it through the opening vistas of trees. I regret to say that I omitted to get its botanical name. They have not yet succeeded in propagating it from seed, otherwise I would have got some with the other seeds of which these kind gentlemen gave me several large parcels of the most beautiful

and (to Bombay) new trees I could find. The seeds are all from flowering trees, some of them of singular beauty. These I have handed over to Dr. Birdwood, the botanist of our new Victoria Gardens in Bombay. I witnessed a capital way they have here of transmitting young plants from place to place, namely, by bending the inner succulent parts of the plantain tree around them, with a very small quantity of mould; this keeps plants moist and cool even during long journeys. Large quantities of vanilla is grown in Java, but its price has so gone down in the market, owing to its cultivation in many other parts of the world; that what formerly fetched 100 florins per lb. now only realizes 10 florins. I was surprised to learn that this plant is not self-propagating, which, curiously enough, is done by birds in Brazil, such as the colibri, and other honey birds, generally called humming birds. It is these little creatures who seize the pollen from the plant, turn back a particular part of the stamen, when the matrix is brought to view, and into which they dip their pollen-laden bills, and impregnation is complete. Boys are employed to do it here. Botany must reveal many wonders to its votaries, whose toil is thus chiefly rewarded. The head inspector of the gardens is Herr T. E. Teysmann, and the first assistant director, Herr S. Binnendyk. Herr Teysmann has the repute of being a botanist of high standing, and Herr Binnendyk has great practical ability, as well as a large knowledge of his profession. The arrangement of the gardens speaks volumes in favour of the labour bestowed on them, besides which they distribute plants and seeds to all parts of the world. I saw some splendid coloured drawings of flower-plants, prepared in the office attached to the gardens, where they were then engaged in completing a revised botanical list of all the plants and trees, including a large number that they themselves have discovered and given names to. They have nurseries in the mountains in which to acclimatise plants before removing them to Buitenzorg; they are also forming a botanical garden at Batavia for plants requiring a drier and warmer climate than the elevated position of Buitenzorg affords. Before quitting this paradise of lovely flowering plants and trees, let us turn to the right before going out by the south gate, near the head inspector's house, where are lots of strange birds, monkeys, a leopard, and a few other animals. The monkeys are notable as having only small rudimentary tails, as if they were approaching that exalted physical state of manhood contended for by Lord Mobboddo when they grew out of tails! One big ruffian had fangs, an inch long, with a chest full thirty inches in girt, and his arms of tremendous

muscle and power. This animal could kill an unarmed man in five minutes. At first his wife was caged with him, but when the daily feeding time came round he used to drive her up above and eat all the rations himself, so to keep her from starving, a planked partition was placed between them; as I always used to take fruit or sweetmeats daily to feed the monkeys all round, I was often amused to see Mr. Ruffian peep through the chinks of the partition and swear in dreadful threatening language to his poor frightened wife, to the effect that if she dared to take what I was then offering her he would pay her off for it! I used to fancy him saying "what he is offering to you I consider to be my property, and touch it if you dare!" And poor meek Jenny would fold her arms and forego the tempting viand. Raw eggs were the favorite food of Mr. Ruffian, and to see him carefully bite off the top of the shell and suck out the contents, showed plainly enough that he knew the joys of birds-nesting as well as any boy in Merrie England. Here are a pair of slate coloured cockatoos from Papuan, with the corners of their beaks of a deep flesh colour, which gave them much the appearance of Dave Carson, when, with devil's wig and ample mouth he shows his merry mirth-provoking phiz to the public. There are also a dozen or so of cocks with plumage of the most beautiful metallic tints and colours the mind can imagine; they are show-birds, and are obtained by crossing the domestic cock with the wild breed found in Java. Such birds would be a great attraction in public gardens, and I hope that some of our rich men will not lose the hint.

I will now mention a few odds and ends which I should have related in their places. The Javanese are so far different from the mass of the natives of India, that they are very cleanly in their persons and heads, and the hair of the women is the longest and finest I have ever seen. It grows in great profusion, and they seize every spare moment to dress and tend it. I saw a woman attached to the hotel Belle-Vue, at Buitenzorg, whose hair, when let loose, fell down, like the tail of a horse, except that it was very fine. I secured one hair (by no means the longest), and it measured *one yard and a quarter*. The head of a Javanese is, in shape, as near a sphere as anything I have seen not to be one. The forehead is protruding and singularly round. Their features would be soft and pleasing only for their high cheek bones and want of nose, of which they have only a trifling apology. The women go bare-headed, but the men wear a handkerchief around their heads; they have droll ways of fixing this, the favorite fashion being to leave two corners sticking out like

the *airns of auld clouty*. The dress of both men and women is to the eye of a stranger alike, consisting of the sarong, which is wrapped tight round the loins, and reaches below mid-leg; the upper part of the body is clothed in what we should call a morning wrapper, something like what the Chinese wear, only that it reaches to mid-thigh. The great bulk of the people do not use shoes, but they are better clothed than the natives of India—not that the latter are too poor to dress better, or I should say with more decency, but the Dutch government very properly will not allow their native subjects to run about in the sight of their own countrywomen within a shade of Man Friday nudity. I think the dress of the Malay tribes generally very ugly, and the people nearly as ugly as their dress. Nearly all the Javanese, and Malays of the other islands of the Archipelago, are Mahomedans, but with no trace of the affectation of caste common to their co-religionists of India. The Javanese deem it an insult to be classed with, or called a Malay, which is often done by strangers from ignorance of this feeling. There are 600 Buddhists in the central and nearly inaccessible parts of Java, but they are fast dying out. The whole of the inhabitants of Java would appear to have been Buddhists formerly, as gigantic ruins of Buddhist temples are to be seen in many parts of the island, of which I have secured photographs as well as photographic types of the Malay tribes. The Malays, like the Chinese, carry their loads suspended on bamboos over the shoulder, and if the load cannot be divided into two equal parts for this purpose, they will sooner carry a stone at one end and the goods at the other, rather than adopt any other method. The Chinese in these islands, by their superior industry, absorb all the good things of this life, the Javanese remaining as "hewers of wood and drawer of water." They are generally the laziest people in the world, and I fear the Dutch government have made them so, by carrying out that fine "liberty-of-the-subject" theory, proper enough for a civilized and industrious people, yet quite unsuited for a lazy and barbarous one. Yet in justice to the Javanese, I must say, that they are very clever in many branches of work; they make an endless variety of things from tortoise-shell and horn; they embroider slippers, make pipes, cigars, &c. &c., and I am told that when trained in factories, they turn out very good carpenters, blacksmiths, and boiler-makers. There is a vast quantity of machinery employed in Java in the manufacture of sugar and other produce, which keeps those branches of trade alive. At Soerabaya, for instance, there are large private factories for making and repairing engines, ships, &c. &c., and to

show the scale on which they are conducted, I may mention that the machine tools in the factory of Messrs. Byers and Company cannot be valued at less than £50,000, and their whole plant at double that sum. It is a Dutch firm, but Mr. Cook, an Englishman, conducts its machinery business. There is good work turned out in it. I saw a river steam barge, with paddles to be worked astern, which this factory had just launched. She is to carry salt up a very shallow river and tow boats down it; she has a rudder to be worked simultaneously at either end, in order to steer her quick in the rapid bends of the river. I think she will be a failure from not having the power to work her paddles independent of each other at the sides, when she wants to turn quick in the sharp bends of the river, and from the work of the engines being employed so far from their seat of power.

W. Cores De Vries, who has the contract for carrying the mails from Singapore to the various Dutch possessions, has a dockyard at Soerabaya, where there is some excellent iron shipbuilding and repairing work carried on. It also is superintended by an excellent man, a namesake of mine by-the-bye, to whom the Dutch post office both at Batavia and at Soerabaya will persist in sending my newspapers and letters, although I have pointed out to both offices the absurdity of sending my correspondence which is directed to Batavia, to a person residing at Soerabaya, 500 miles away! I find I must get back to Buitenzorg to mention that the Government have recently instituted a mining college here, which already possesses a very promising museum: a most wise course when it is considered that they derive their chief revenue from tin, with which, it is said, the whole of the islands of the Archipelago abound, Sumatra especially, although their chief tin mines are at Banka and are worked piece-work by Chinamen. Buitenzorg lies at the foot of a mountain called Salak, 2,500 feet high, which exercises a decided influence on its climate, as nearly all the time I was there, lightning and heavy thunder was the order of the evening. There is yet further S.E., a higher mountain called Guidé. The Belle-Vue Hotel is the best for English people, as their cookery is better adapted for our palates. It has a large plunge and swimming bath with a stream running through it, and the scenery and river at the back, with Salak to fill up the distant view, is truly magnificent. Six miles beyond Buitenzorg is a place called Sindanglaya, 1,600 feet above Batavia, and which is an additional and more distant retreat for an invalid if Buitenzorg is not high enough. There is a natural plunge-bath at the foot of Salak (a five-mile drive) caused by a spring. The water is intensely cold, yet has, I

think, some medicinal virtue, as I never felt my skin so agreeably refreshed and invigorated as after bathing in it. We came home loaded with watercresses, which grow in a catch-water pool which receives the water from the spring. I left Batavia for Soerabaya on 7th August; whence I go to Pasoeroean, forty miles from Soerabaya. I shall only remain a short time there, when I shall return to Soerabaya to go by steamer to Samarang, 204 miles.

The cholera has been very rife this year in Batavia, Samarang, and Soerabaya; although I was told that the scourge very seldom visited the Archipelago. The landlord of the hotel I am staying at died ten days before my arrival, and one gentleman has died, and several have had slight attacks, since I have been here. In the early attacks I have known Davis's pain-killer cure more people than all the cholera mixtures put together; it is a certain cure for diarrhœa in its early attacks.

TOM CRINGLE.

Soerabaya, August 3rd, 1864.

SOERABAYA AND PASOEROEAN.

No. XXIX.

I sent you in a former letter a Jotting on Buitenzorg, the seat of the Governor General of the Netherlands India. I now have a few notes to make on Soerabaya, which, only for its more distant position from Singapore, and the general communication with Europe, as well as its distance from many other possessions of the Dutch in this quarter, would no doubt have been made the capital of Java. It is situated at the extreme North-east end of Java, with the island of Madura on its north, distant about two miles, whence all the cattle for converting into beef are drawn for the lowlands of Java, at which place they do not thrive. It is curious and instructing to observe the providence of NATURE. In India, in fact all lands having a dry parched summer, the sheep and cattle have, the one large tails, the other large humps of fat, wherefrom to derive a supply of carbon during the season of drought; but here, with green grass all the year round, no such appendages are seen. Wherever the Dutch go, they seem determined to have canals, Batavia, Samarang, Soerabaya, and

Pasoerocan being scored with them. This has been managed by pushing out into the harbour the mouths of the small rivers they have at each of the ports named, and then straightening and extending them through the cities at pleasure, at the same time forming locks, basins, &c., for mercantile purposes, and lining the sides with brick walls. It is astonishing what great services are derived from these canals. By their means all the import and export trade is carried on, and produce brought from a considerable distance inland, to say nothing of the passenger traffic and the berth accommodation afforded to the coasting craft. The canals are alive with bathers all day long, and all horses are washed in them every morning. I frequently see men, who having cut down a large bamboo and thrown it into the river, have tied their clothes on their heads, got astride, and arrived in the city from long distances in the interior, selling their bamboos to buy a dinner from the Chinese vendors who stand at every corner of the streets. All the trade of Singapore is conducted on a river like what I have described, only those in Java have bars of mud at their mouths, whilst that of Singapore has not. Vessels of 300 tons burthen can enter the canal at Soerabaya.

It is remarkable not to see more birds about the coasts of Java; with the exception of crowds of small bats which fly about in the evening, and the common-house sparrow, scarce any others are seen. The pretty little fellows known in Bombay as Java sparrows, are not seen in Batavia, but here they are more common, and occupy the house tops in company with the common sparrow. All the bright plumaged birds of the Archipelago are very tender, as are most of the handsome plumaged birds of these islands, their habitat is chiefly the Moluccas group and New Guinea. Owing to the daily tides carrying a fine breeze through the strait formed by the opposite island of Madura, Soerabaya is both healthy and cool, and liver complaint is quite unknown. In fact so little is this scourge of India known in Java that many people have never heard of it. Cholera is also a rare visitant, but this year it has not only been prevalent, but rather severe, although, except in a few cases which always characterise this mysterious disease, its ravages have been chiefly confined to the natives, who live in filthy localities, and to the soldiery, amongst whom there is a great deal of intemperance. I begin to think that the Dutch custom of taking bitters and hollands gin (a quarter teaspoonful of the former in a small liqueur glass filled up with the latter) is a very healthy practice in a warm moist climate like Java. It is taken just before sitting down to any meal where

meats are eaten; it gives a fillip to the appetite, and stimulates digestion. I have adopted the practice with very great benefit, and I shall not abandon it when I leave Java, without good cause. The Dutch say that brandy is not good in a hot climate, and that it is the chief agent in sowing the seeds of liver complaint. To those of week digestion I strongly recommend a trial of the virtue of Dutch Schnapps. The bitters used are various, but that made from the pommelow rind is the best I have tasted.

Pasoerocan is 36 miles from Soerabaya, and in a sense may be called the Brighton of Java, as with the exception of two or three mercantile firms, who make small shipments of sugar and coffee, it is the residence of retired planters and fat Chinese who have made large fortunes and come here to enjoy them. It has its canal of course, as the Dutch would not feel comfortable without one, but the mouth of it is so choked with mud that the small coasting craft can only enter at the spring tides, and none but canoes can enter at low water. The streets are (like all the Dutch towns in Java) spacious, straight, and planted on both sides with (mostly) fine lofty tamarind trees. Residents have to water the roads opposite their dwellings every evening. There is a Club-house with considerable pretentions to architectural beauty. It has a lofty Italian portico reached by marble steps. It is floored with white marble, has high and spacious rooms, with a stage and proscenium for theatrical performances. The person in charge always permitted me to sit in their reading room in which I found the *Times of India*, *Punch*, *Illustrated London News*, *London Times*, continental Illustrated Papers, Magazines, &c. &c. Numerous balls are given here, and are attended by all the rank and fashion of the place, but all mix freely and sociably together, the gentlemen especially being devoid of hateur, the only shade of it I could anywhere detect, sitting very badly, and even laughably, on the faces of a few good old *fraus* who constitute the *haut-ton* of Java. I like the Dutch very much, they are not only gentlemanly polite to each other (I mean the higher orders), but they are equally or more so to strangers, as well as to their own countrymen of the working class. It is not the surface, glossy politeness of the French, but has a wholesome smack of Saxon honesty in it.

The Europeans are quite as healthy as in their mother-country. Very few of the Dutch carry rosy complexions, but all those who might be expected to have it at home have it here at Pasoerocan. There is only one hotel at Pasoerocan, but it is enough for the wants of the place, and is kept by M. Constant, a Frenchman, a most admirable man in every respect; one

of nature's gentlemen, in figure, mein, and hearty good nature; one of those men, whom, when you part with, you would like to meet again. Monsieur Constant, I bow to you as a good fellow, and I shall send you a copy of this book, so that you may see written testimony of my respect towards you. His hotel is a pattern of neatness, and, what is of greater importance, the viands served at table are such as an Englishman can partake of with pleasure and satisfaction. M. Constant is the only hotel-keeper I have yet seen in Java who will exert himself in behalf of such of his guests as cannot speak the language, and it comes from him with a greater grace as you feel that he takes a pleasure in doing so. He is a man of great courage and tact, and has been a famous juggler in his time; he travelled all over the Eastern Archipelago, and by means of his great skill (of which I saw one or two surprising instances) he was enabled to penetrate into the interior of Sumatra, to parts where even the Dutch who live on the frontiers dared not venture.

The inhabitants of Eastern Java are better looking than at Batavia; some of the women may even be called pretty, the nose being more prominent, while the cheek bones are not high, and the curve of the lower jaw and chin is soft and pleasing. I am informed that the higher class of females in the interior of Java are even handsome. I cannot believe this, only in, perhaps, exceptional cases, as I have photographs of men of rank in the interior, and I can see nothing in their features of transmissible beauty.

On the 23rd August I went with a pleasant party to visit a lake called Grati; which is evidently over the bed of a sunk crater of a volcano. A high mountain called Tinger towers to a vast altitude above it, the active Volcano Bromo with its lofty summit hidden in the clouds in the distance. The lake is happily so elevated as to admit of it being tapped to irrigate the extensive and fruitful sugar estates in its lower neighbourhood; but it is famous for its crocodile (there being, it is said, only one). To try and get a glimpse of him, a duck was obtained from a neighbouring village, tied to a float of palm leaves, and taken out a quarter mile or so by a man in a canoe, who upon returning gave a long *co-e-e-e* sort of cry, inviting the saurian to come and take his breakfast. In nearly all cases he responds to the welcome call, swims to the well-known spot, and in one gulp, down goes poor quacky, reed-float and all. In our case we were not fortunate. M. Constant, who kindly accompanied us to show the lions, called him in the most winning tones, but he would not come. M. C. suggested that he might have already breakfasted off a fat Javanese, then why should he come for "what

you call him—one lean duck?" This lake is 12 miles from Pasoerocan; a lovely spot called Bluewaters lies 11 miles further off though in a different direction.

The splendid posting service of Java, both governmental and private, always enables the traveller to get on at the rate of 10 or 11 miles an hour, and I have gone for 40 miles, on end at 13 miles per hour, with four small Java ponies harnessed to a heavy English Berlin carrying four heavy sitters, a coachman, and two grooms, besides 3 cwt. of luggage. The stages are only five miles.

Bluewaters is famous for its wild monkeys, of which we had heard much, and on our arrival at a high bank above the waters, dozens of them were seen sitting on the fence by the roadside. By the time our party had alighted the two carriages were minutely inspected by them for eatable fragments, after which they pulled down the green fodder tied on behind the carriages for the ponies, and plucked all the vetch beans from it they could find; and then they thought it high time to see what preparations were being made for our pic-nic to be held in an open verandah of a bungalow on the margin of the terrace overlooking the waters. These waters result from a powerful and copious spring, and are confined in a tank some 200 feet long by 100 broad, overhung by magnificent old Druid-like trees, which lean over the tank in a wonderful manner, and as if endowed with mechanical instinct, have thrown off to a distance of fifty feet, giant stays to prevent the enormous trunk and its acre of foliage from falling into the tank below, while to make doubly sure that this should not take place, the parent stems have thrown down strong buttresses on the side of the tank as an additional support. I have seen many vegetable wonders, but never before saw such a near approach to instinctive reason in insensate matter as was here evinced. There were lots of Javanese—both men, women, and children—bathing on the margin where the overflow weir is made. To look at the water pouring from the tank in a full cascade into the nullah below, is a pretty sight; it looks and sparkles like liquid sapphire, of such a deep clear blue is the water. The Dutch, in their kind, old-fashioned despotism, who like to do things that will add an attractive pleasure to places of public resort, have imported carp from the mother-country; they swim about in hundreds—fat, big fellows, two feet long, with other youngsters of lesser size; and so used are they to being fed that they came to the side of the terrace where we are standing, and all but asked for bread, but M. Constant, our master of ceremonies, decided that feeding

the carp must be postponed until after tiffin. Meanwhile we walk about the grove of mammoth trees once sacred to Buddha, the stone image of whom, together with that of his young friend Gunesha of the elephant head, still stand on the side of the tank where they were worshipped ages ago when it was a privileged honor to give them a fresh lick of red paint or adorn them with the customary garland of flowers. Mahomed has displaced Buddha, and the last dying remnant of his devotees now only number some 600 people, who live on the summit of mountains, or amid the solitary ruins of the gigantic temples now falling to decay. In the meantime the monkeys are hob-nobbing with the natives, getting a handful of rice from one, and sweets from another, with a total absence of mistrust. Others follow us about, no doubt wondering why we don't come back to the nice tiffin which they had watched spread out for us in the veranda overlooking the waters. At last our steps veer round to tiffin bay, the younger monkeys throw up their arms with glee at the thought of the glorious feast in store for them; the female portion run along with their little ones hanging under their bellies, and by the time we are seated, there are hundreds dotted round about only just out of safe reach of the long whips of the two Javanese coachmen, but for whose presence, thus armed, not a scrap would have been left on the table a minute after it had been placed. While we enjoyed our meal we did not forget jacko. One hoary-headed old blade even sat close beside a little boy of our party, aged seven, and with patient thankfulness received the nice things his young friend so kindly gave him—perhaps he may have even thought what a pity Nature had not given him a fine long tail like his own. In another place was a fond mother whispering to her darling to quit its hold and retire from the scrambling fray until mamma could run in and secure a prized plantain or a knob of fine bread, when the wee little one would scamper up the nearest tree, watch its parent with keen regard, and as soon as the prized viand was obtained, was at the foot of the tree in a second to meet its mother, and have a suck at the lacteal bottle, whilst mamma ate her food in grateful quietude. We repeatedly witnessed this interesting sight. The males did not appear to take the least share in assisting to feed the infants, while the *youngsters* had a very hard time of it from the old hands. If one of the young fry secured a prize it would utter suppressed screams for fear some elder should have seen and coveted the scrap he had at last obtained, and often a big fat fellow—a sort of Bill Sykes—would leisurely walk to the spot, and as plainly as possible say, "Come,

young shaver, hand that, ere plantain here," and the poor little fellow would not dare to refuse. Some few, more courageous perhaps than the rest, would run off after the summons to surrender had been given, but Bill Sykes would make a few giant springs, and with a clutch of his iron fist dispossess the unhappy youth. These monkeys have one or two peculiarities worth describing. They are of a lightish colour on the back and sides, white bellies, face the colour of a sun-bronzed European field labourer, whiskers a shade lighter than the hair on the back, and oh funny addition, moustaches! But where placed? Well, if ever kind old Dame nature was deep in her cups she must have been so when adorning these monkeys; for in a fit of maudlin unsteadiness, she must have seized from her well-stocked "property room" as fine a pair of jet black moustaches as ever Bond Street dandy sighed for, and planted them—not under—but on each side of the middle of the bridge of the nose! and very droll they look. These monkeys have a peculiar walk, just like the stealthy tread of the pointer, when game is sighted, although not so crouching.

An hour after tiffin another of our party and myself determined on a "header" into the tank—right into the midst of the crowd of carp, who were busily employed in ravenously tearing to pieces a loaf of bread which had been thrown in whole. They were shy of it at first, we only having hitherto thrown in small pieces, but presently an old veteran went up and smelt it, retired, communicated with the main body, and then ventured to give a nibble; when this was seen by the ruck, first one, then another would take a bite, when in a moment, the water was lashed into broken foam by these mad fish leaping and plunging like tigers after the floating bread. As it became softer from soaking, one big fellow broke off a large portion, and a breach having been once made in the crust it was soon divided into fragments, around each of which was a loud noise of plunging fish eager to feast on the wheaten dainty. In a few moments not a particle remained, and the carp again assembled close to the verandah, poking up their noses for more food; so stripping to flannel drawers, in one of the bath-rooms attached to the building, I, (six feet of white bait), took a header into the midst of them, and although I dived with my eyes open, I of course did not succeed in catching one! In a joking spirit I asked the father of the little boy to throw him in the tank, and I would teach him to swim. To my great surprise he threw him in, and so close beside me that the splash of the water so blinded me, that I could not see where he went down, and had to wait patiently until his head

bobbed above the surface, when I quickly lifted him up; he was a little scared at the turn things had taken, but being a brave little fellow he was soon all right, and I dare say his bathe in the Bluewaters will not readily fade from his memory. The water is intensely cold, so much so that few people dare venture to bathe in it.

After a pleasant stay of four or five hours we returned home, having enjoyed ourselves exceedingly. It is such trips as these which take the brain-screw off the mind, and smooth the wrinkles out of a dyspeptic liver. The private houses of the Dutch exhibit, in every particular, extreme domestic comfort; and no people in the East so wisely enjoy themselves as they do. They live much in the open air, or in their fine, large, open verandahs, which mostly run the whole frontage of the house, with a depth of twelve to twenty feet. They are early risers, take their *constitutional* before breakfast, after which Sahib goes to business. If possible, all the family join in a hearty meat tiffin at one o'clock, after which the doors or compound gates are closed, the whole household, down to the cockatoo, go to sleep, and wake up at four fresh as larks, to go through the social pleasures of the evening. They are the best patronisers of itinerary amusements I have ever seen, and they never let a false and slavish fashion hinder their pleasure. It is this agreeable social state which causes so many monied men, whose working life has been wound up, to settle down in Java to end their days. Many go home to the mother country, but, finding the climate too keen, and a loss of the social position, dignity, and respect they had always enjoyed in Java, not accorded perhaps in Europe, they return to the old social nest, where, with the favorite canal in view, and a cow or two transported from the fat meads of Holland, feeding on the velvet lawn in front of the house, he smokes indeed the pipe of peace and comfort, till old Death comes with a kindly "good night," puts the extinguisher gently over Mynheer's head, and he is buried in the church-yard beside other kin who have gone before him. Their burial-grounds are well planted, the tombs and monuments raised to the memory of departed friends are in general well designed, and in good taste. I noticed in many instances that half-inch panes of plate glass are luted into the panels of inscriptions on tombs, which preserves the freshness, and ensures the durability of the letters, as the weather cannot act on them. Another good custom is that the grave of the poorest and most obscure person can always be pointed out to enquiring friends by means of a very simple plan which all towns might copy with advan-

tage. In the first place, their burial-gounds are arranged on a regular plan, and not occupied, as at Ootacamund, in a confused pell-mell style, or as at Bombay, where the dead are nibbled out of their coffins by sandcrabs, or washed out by high tide gales of wind, and where, against the health of the living, they are placed on the windward side, and where the rank grass is breast high in the monsoon, or a sandy desert in the dry season. No; the Dutch are a more orderly people, and so arrange their burial grounds that they are pictures of arboral beauty. There are places for the rich to raise the splendid family mausoleum, but the grave of the pauper is not forgotten before he has been laid a month in his last resting-place. This is managed by having marble slabs about eight inches square, which are numbered by deeply cut figures from one upwards. These slabs are let into a durable teak stake which is driven into the ground at the head of the grave, and thus the number of each grave stands recorded in the sexton's book kept for that purpose, which gives date of burial, number, name, age, and other particulars, including the section of the ground that the person is buried in. Prayers are not read over the dead at the grave, but at the church. I witnessed the burial of a non-commissioned officer of the Dutch army stationed in Batavia; with the funeral party were drums and trumpets, and a firing party. When the party were drawn up on each side of the grave and the corpse lowered down into it, two muskets were discharged over the body. An officer of the company, to which the deceased had belonged, then stepped out from the throng, and with considerable eloquence and feeling, pronounced an eulogium on the good soldierly qualities of the departed; it was short, but appeared to the purpose; when he had finished, three volleys were fired *into* the grave (not, as with us over it), then each comrade reverentially cast in a handful of "dust to dust," the military party marched off, and the grave was filled in by Javanese who were respectably dressed in snow-white tunics and black trousers,—no head covering.

I left Pasoeroean by means of post horses and carriage (they call ponies, horses, here) for Soerabaya, whence, after a stay of two days, I left by steamer for Samarang, but to which place I only went on shore for a few hours, as I had seen all that was of note on my previous visit. A story is told here of the celebrated Governor-General Dandaels, who ruled the Dutch settlements in the Netherlands of India many years ago, and who being at Samarang, where a Chinese millionaire had built a colossal house, which would answer admirably for a hospital for the many sick among the Dutch soldiers, and who had nowhere to

lay their heads—Dandaels sent for the Chinaman, told him of the strait they were in for want of a hospital, asked if he would sell it to the Government, offering to give a good price for it. John Chinaman shook his head, and refused to sell. Dandaels advised him to go home and take a day to think the matter over. He went, but on the next day when called on for an answer he was still obdurate against selling. Dandaels ended the matter in the simplest way imaginable—by hanging the Chinaman as an enemy to the State, and then confiscated all his property! It is said that the Celestial offered a million florins to be let off, but the iron-minded Dandaels was obdurate and florin-proof. The hangman had persuaded the Chinaman that the Government would never think of hanging a rich man like him. What, hang a man worth 10 millions of florins! Impossible! Told him he would sure to be reprieved at the gallows. Hastened him up the ladder so that the release would be the quicker spoken by the sheriff—they only wanted to frighten him: would he let the rope be put round his neck?—people were never reprieved until the rope was properly adjusted around the neck, so as to cause the reprieve to make more impression. The poor confiding wretch believed, down fell the ladder, and he was hung as a caution to others not to fail in their patriotism. It is said to this day that he used to perambulate the Bazaars with a halter in his pocket, wherewith to hang all defaulters with short weights and measures, dealers in damaged grain, or fore-stallers in the same. Before his time there were no roads in Java; he issued an ukase for the whole mass of inhabitants to be set to work to make them; and in two years there were splendid bridged roads all over the island, the main, through, trunk road, being 600 miles long, splendidly made, and planted with a fine row of trees on each side, with a special road on one side set apart for the use of bullock carts, which are not allowed to be run on the main or posting road. These roads are kept at all times in the highest order and repair. They are swept as clean as a drawing-room floor every morning, not a fallen leaf is visible on them. We have held India this century past, yet up to this day we have no trunk road between Bombay and Agra, or to Madras, to say nothing of bridges. I think if we had had a Dandaels half a century ago it would have been good for India at the present day. Our Malabar Coast, and Galle harbours moan for a Dandaels, who would concentrate all our lazy convict labour now uselessly employed planting cabbages on the Andamans, and set them to the grand, and ever-useful-for-all-future-time task, of throwing out stone groins to intercept the southward flow of sand which is

creating sand-bars to many, which would only for this, be fine harbours along a coast so much in want of them.

Before I close this letter I will give the particulars of a mishap at Soerabaya, which will furnish a useful hint to Bombay, should it ever form a Company for providing a floating dock for repairing and overhauling ships, a want that ought to have had the earliest attention of its merchants—certainly before she had started *thirty-one new banks*, which must now be as thickly crowded there as beershops in St. Giles's.

Soerabaya has docks but they belong to the Government, who cannot spare them for private purposes; so the mercantile community organised a company, who ordered out from a Scottish firm an iron floating-dock capable of receiving two ships at a time. In due course they were received, piece-meal, put together at a small port five miles from Soerabaya, launched, and moored in its berth in the roadstead, where in due time a trial was made by immersing the dock to take in a steamer of some 600 tons. The steamer entered, but when the pumps were set in motion it was found that, from some cause or other, the pumps were inadequate to their work of floating the dock, and the whole dock (costing £250,000) sank to the bottom, an irretrievable loss, being buried in a mass of mud and sand impossible to remove. The steamer having her steam up backed out undamaged.

The company got out a gentleman with the hope of raising her, but the means employed were as inadequate for the task as it would be to attempt to lift the Pyramids by means of slings from a balloon.

Moral:—Let the makers put the dock together in Bombay, and work them on a guarantee for the first twelve month. One is much wanted in Bombay, into which to admit steamers for a tide to clean bottoms—nothing would pay so well; many clipper sailing ships even would use it every voyage.

I witnessed in Soerabaya something very creditable to the Dutch Government; from 8 o'clock A.M. till noon each day the guard ship and other men-of-war in their harbours take it in turn to hoist a black flag at the fore, to give notice to all merchant ships that the best medical advice and medicines are at the service of any merchant seamen of their nation who may go on board to receive them. This is not given to save expense to the shipowner, but to ensure to the poor sailor the best medical aid and medicines which, on the plea of expense, he might otherwise fail to receive from his ship.

Before leaving Batavia I sent off the following piece of news, which, *somehow or other, did not turn out* to be true!—"I send

you a report of a balloon said to have descended in Java, which indeed leaves fiction nowhere. When the Dutch steamer *Konigsen* arrived at Soerabaya she had on board a Mr. Holland, one of the largest landholders in Java, whose estate at Pamanoekan is 13 miles long. His brother was on the estate, and sent him a letter containing the following startling intelligence: that on the —— September a balloon landed on their estate containing four gentlemen and one lady;—that they had left Paris 13 days previously for Moscow, but had been blown out of their course. He gave his brother the names of all the party, but my informant could not recollect them. I give you this just as I had it when on the point of leaving Batavia on the morning of the 15th Sept. The incident is reported to have occurred in the early part of this month." Tom has been taken for a "Marine."—*Times of India, Oct.* 6.

On the 18th September I arrived in Singapore, from whence I had made arrangements to go to Moulmein by the *Persia*, belonging to the British India Steam Navigation Company; but having to put my horse, and a whole aviary of birds, on board the P. and O. Company's steamship *Orissa*, Capt. Hector, I did so, and was invited to stay tiffin by the chief officer, Mr. Handcock, which I did, and being pressed, and having nothing to do, I stayed dinner, and even slept on board. I was so charmed at being again on board one of their clean and well found ships, and being also informed that I should have both wind and rain whilst crossing the Bay of Bengal, I finally determined at the eleventh hour to take my passage from Penang to Galle in the *Orissa*, in order that I might give the care of my horse, and the birds I wished to present to the Bombay Victoria Gardens, my personal supervision. Thus, but for a merciful God and the chance pressing kindness of Mr. Handcock, in asking me to stay tiffin, I should otherwise have gone straight to the office of the B. I. S. N. Co., taken my passage by the *Persia* for Maulmein, Rangoon, and Calcutta, and should thus have been lost in that illfated vessel with all the other passengers, in the fearful cyclone which visited Calcutta and its neighbourhood in the October of this year. So fixed had been my purpose of going by her, that up to the time of writing many of my friends believe I formed one of her passengers.

When leaving the *Orissa* at Galle I left on board a number of birds, &c., to be handed over to Dr. Birdwood for the Victoria Gardens, Bombay, provided that an aviary should be prepared for them, a sketch for which, with measurements, I had forwarded two months before, with an intimation that I

would bring up a good stock of beautiful birds as a donation to the Gardens. What was my surprise on arrival in Bombay two months afterwards to find that no place had been prepared, and that in consequence they had nearly all died. The following is the list of what I forwarded :—

6 Large Parrots green, with blue and red wing feathers.
5 Ditto red with blue and yellow do.
9 Cockatoos—two of them rare.
5 Tree green Parrots—very small, two of them run in a squirrel cage.
4 Lowries—very beautiful.
1 Bayoo, or Black Mina—highly valued in Java as the best talking birds in the world.
18 Doves of sorts—some of them the celebrated cooing doves of Java.
200 Java Sparrows.
150 Small rice birds—very pretty.
1 Pair Fiery backed Pheasants—very rare.
5 Paroquets.
3 Sumatra Monkeys.

Out of the whole of which there remained :—

3 Large Green Parrots.
3 Do. red. do.
3 Do. Cockatoos.
1 Monkey.

From Galle I went to Colombo and Kandy, of which more in my next.

TOM CRINGLE.

October 4th, 1864.

COLOMBO.

No. XXX.

I arrived at Point de Galle from Penang on the 29th September, a distance of about 1,200 miles. We had a little rain and wind from the N.W. monsoon. Finding that the *Golconda* from Suez had not yet arrived, Major Meares, of the 20th Regiment, Bengal Army, and myself, agreed to take a run up to Kandy viâ Colombo. Between the latter place and Galle, and also between it and Kandy, a two-horse public stage starts morning and evening at 6 o'clock. It is very well horsed, and the drivers are skilful. Those who drive between Colombo and Kandy are respectable Europeans, which somewhat reminded one of the old branch-road stage coachmen of England. As it may be convenient to travellers, I will give the expenses of Major

Meares and self for the trip from Galle to Colombo and Kandy, and back :—

	£	s.	d.
Fare to Colombo for two (72 miles)	4	10	0
Tip to coachman at Bentotte rest-house (34 miles)	0	2	0
Ditto ditto at Colombo	0	2	0
Ditto ditto groom	0	1	0
Breakfast at Bentotte	0	5	0
Guide at Colombo	0	1	0
Hotel (one night), Colombo	1	2	0
Two seats to Kandy (72 miles)	5	0	0
Breakfast at Ambepusse rest-house (36 miles)	0	6	0
Tip to driver and groom	0	2	6
Ditto at Kandy	0	2	6
Hotel and servants (2 days), Kandy	2	9	9
Carriage to Botanical Gardens	0	9	6
Fare and tip to driver back to Colombo	5	5	0
Hotel (one night) Colombo	1	2	0
Fare for two to Galle	4	10	0
Breakfast and driver, Bentotte	0	6	6
Driver and groom, Galle	0	1	6
Coppers to children along the road	0	6	0
Total...	£26	4	3

There are probably many readers in India who know that the currency of Ceylon is in £. s. d. as in England. Yes; with an Arcadian simplicity truly refreshing, the Imperial Government when asked to furnish the Ceylonese with a new coinage, in lieu of the barbarous *dumps* they then possessed, sent them out the elegant coinage of Great Britain, forgetting that these people traded with the inhabitants of the adjacent ports on the Indian continent, where their new coinage was uninterchangeable. The British Government have long been straining to swallow the little gnat of English sovereigns for India, but bolted at a gulp the Ceylon elephant of a coinage totally unsuited to the wants of the people.

We got off from Galle at 6-30 A.M. with two native Ceylonese passengers, besides ourselves, my companion and self keeping possession of the box-seat by turns, and which we very much enjoyed. The road skirts the sea shore nearly all the way to Colombo, and I do not think it is a half mile from it at any place along the route. On each side the road are the densest cocoanut groves I ever saw—there did not appear room to put one more tree; all along the road are dotted native cottages, and occasionally neat villages, snugly embedded in the dense shade of the cocoanut trees. The villages we saw, were located alongside the road—in fact, to look fifty yards from the roadside, the trees and underwood looked too dense for even a man to penetrate, yet there are towns and villages with open park-

like glades of unequalled beauty, a little beyond this dense sea-margin belt. As we sped on our way we frequently saw on the roadside pretty Roman Catholic and Protestant Missionary chapels, the pastors of both of which have made their presence felt here with marked success in the clean and joyous features of their converts. We were surprised, at the posting stages, to find the boys speaking English with scarcely any foreign accent; and their cleanliness, both in person and clothes, did them great credit. These Christian communities appeared to live in great neighbourly charity with the Bhuddists and Mussulmen around them, for in many places on the road-side we saw Christian religious collection-boxes, which appeared to be treated with respect by the surrounding heathen, chiefly, as it appeared to us, on account of the faith reposed in the population that they would neither rob nor break them. My agreeable companion, Major Meares, a thorough gentleman, an extensive traveller, well read, and of an amiable and humane disposition, caused our trip to be one of great pleasure. We used to exercise our perceptive faculties at the halting stages, by guessing, and then ascertaining by enquiry, which were Christian children and which not; and it speaks a great deal for their pastors when I say, that we seldom made a mistake. One little anecdote connected with this subject is worth relating:—

Some lazy blacksmith, who repaired the stage-coaches, put in a new axle upper spring bolt, but left an unnecessary spare end of 2 inches beyond the nut; this, at every inequality of the road, used to come down on the lower spring with a punch-like *thud*, which would leave teeth indentations in the tongue, if it chanced to be wagging at the time of impact. I find that there are few physical evils which may not be cured or abated by a little ingenuity, so I got off at one of the stages, and selecting a green butt of a palm branch, lashed it to the axle in such a manner, that the offending bolt should punch into its tough fibres, and thus ease the shock; in doing this I was voluntarily assisted by a young man, who, after the job was finished, retired among the crowd in lieu of waiting close at hand and *looking bucksheesh*, if not asking for it. I was so pleased with his good nature and retiring modesty that I called him to me, and asked why he assisted me unasked? He replied in excellent English, that it was his duty as a Christian to assist me when he saw I wanted aid. I shook him by the hand and thanked him, at which he was much pleased. I determined to withhold any present, as I wished to show him that there was a nobler payment than money, and as we drove off I was glad to notice that he still showed no

unholy desire for coppers. Dear reader, how do you like my Indian, or rather Ceylonese, phœnix? I much regret that I did not note the name of himself and his village—it would have gladdened the heart of his pastor to find that his teachings had fallen on good soil.

On we went, always something to note. I saw that every cocoanut tree had two branches of the same species plaited around the trunk, intermixed with prickly cactus, about ten feet from the ground; these acquire a dry, rustling crispness, and should any one be tempted to ascend to steal the nuts, he must pass over the dry branches, which would make a great noise, when the owner would spring from his hut close by, and make the thief acquainted with the police. But the laughable difficulty of identifying the sexes was a source of never-ceasing merriment for the Major and myself. Both sexes wear their hair tied in the classic knob of ancient Greece, and when let down it often curls in graceful ringlets. The features of the young natives along this line of road, and also at the southern part of Ceylon, are singularly soft and feminine. Both sexes wear a cloth wrapped around the loins, which reaches to mid-leg, like the Java sarong—the costume is completed, by either a short calico jacket, or a cloth saree over the shoulder and crossed on the breast, with a checked handkerchief on the head. These, to a stranger's eye, are identical in shape and fashion, and are worn in common by both sexes; and we used to create roars of merriment among these happy people by guessing boys as being girls, and *vice versa*. And in some instances I would defy any one to tell the sex, as the women of Ceylon are not moulded with that graceful, swelling curve from the waist over the hip, and descending down the rounded thigh to the knee, again to curve over the well formed calf, to the taper instep, so dear to the painter and his brother in art, the sculptor. I think, from the full gazelle-shaped eye and handsome intellectual features of the Ceylonese on this part of the coast, that there has been an intermixture of Arab blood, owing to that nation having traded so many centuries with Ceylon. I find that on the road from Colombo to Kandy, we did not find a trace of the beauty we thus saw on the Galle road. At every hut we came to, fine large cocoanuts were for sale. I would recommend some of our ailing Europeans in Bombay to drink the milk of fresh-tapped cocoanuts; I got quite accustomed to the practice, and always preferred it in the early morning to the usual warm slop called tea, which I am sure must destroy the healthy tone of the stomach. Many may experience a healthy aperient effect from drinking this milk.

In due course we arrived at the rest-house at Bentotte, or as we call it in India, travellers' bungalow. The term resthouse is derived from the Dutch, who formerly held possession of the sea-board of Ceylon. The one at Bentotte, 34 miles from Galle, is beautifully situated on the summit point of a cliff forming the southern horn of a bay of the sea-shore. The traveller, tired, dusty and thirsty, ascends this hill from the road below, where he leaves the carriage, and the first sight which greets his eye is the white sandy sweep of the bay, encircled with an emerald coronet of graceful cocoanut trees, the foremost of which bend, as with eager rivalry, to kiss the murmuring wavelets which purr on the snowy sands. The tired eye, thus refreshed, eagerly searches for yet further gratification, and turning to the right discovers a pretty lake, still and glassy as a mirror, into which the dryads of the forest, which encircle it like a frame, nod their feathery plumage as if pleased with their reflected images. The kingfisher sits on a branch, still, as if carved in stone, when, in an instant, he is changed into a gem of emerald and burnished gold, sinking and flashing like a jewelled plummet in the still waters of the lake after its prey. Yet further back, like a silver cord on green velvet, is a river which springs from its forest confinement, and throws itself into the lake like a pretty bashful child into the lap of its mother. Turn we again to the sea beach, and behold the cunning, practical crow, high poised in the air, from whence he throws from his bill with all his strength, on to the rocks beneath, an oyster which he has filched from the man's basket who is gathering them from the rocks for our breakfast. He fails many times to break the shell, but, like Bruce's spider, he tries again, and at last succeeds. But, oh, shameful wrong! As he can't descend as fast as the mollusc, a cunning brother crow who has been watching the result of each concussive fall, round a hidden corner, seeing the shell-less oyster laid out so invitingly, seizes it with lightning-like rapidity and flies off, the other following him, and screaming with rage, which no doubt in Corvo language meant "stop thief." But the oyster has long disappeared down the robber's Dando-like gullet; and he is only now fleeing to avoid his pursuer's *bill* for refreshment supplied! After a dip in the sea we ascend the hill again, and find the following nice breakfast laid out on a damask white table-cloth, with plated dishes, &c. &c., and presided over by an intelligent Ceylonese who can talk English with an accent an Oxonian would not blush to own. Here was mulligatawny, roast fowl, ham, rice and curry, fried mullet, and stewed oysters; but of tea or coffee none, as those

refreshing beverages (when properly prepared) had evidently been found to interfere with the more lucrative sale of beer "to be drunk on the premises." However, we did very well, for we ate a good breakfast, then had another leisurely look at the beautiful scenery as we sat in the breezy shade and smoked our matutinal cigar; then descending the hill, mounted our carriage, and went on our way rejoicing—nothing to mar the harmony of our thoughts—*but the steamer!* This was our only skeleton in the mind's cupboard. Would she come in and start off for Madras (where we were both bound) before we could get back from our trip, cribbed upon an inductive faith in the *Golconda's* tortoise speed? These unbidden thoughts we would puff out of memory with the smoke of our cigars, and go on as oblivious of the skeleton as if we had never seen an impatient roar of steam, threatening instant departure. Presently we came to the Cultura bridge, a quarter of a mile long, across a lake-like river, the scenery being very pretty. It was on the sea coast near here that the P. and O. Company's steamer *Erin* was wrecked some eight years ago, as part of her hull on the beach yet testifies. What wonderful good fortune that Company has had; they have been in existence thirty-two years, and have never lost a passenger's life by wreck or mishap caused by the Company's servants. No drowning! I wonder if any of their many thousand of passengers are reserved for the other proverbial fate? Not the dear ladies and children of course—I allude to us rough-bearded fellows, who drink beer, smoke, and play ship quoits.

At 4-30 P. M. arrived at Colombo. After a wash and brush up, we went to look about us. Galle Face—an open esplanade overlooking the sea beach—first commanded our admiration; whilst on the landward side were pretty houses embowered in fresh green trees—the fort ditch very full of clear water which serpentined about—now hidden, now in view—so as to appear like a series of small lakes encircling the houses. We pass through the low, Dutch-built fort gates, and are again in the town, which is considered the cleanest and most European looking in the East. It is certainly clean; and its most notable architectural sight is a good-looking block of buildings in the Italian style, built and used for public offices. Government House is a fine large building of no particular order, but clean and neat, and although in the very middle of the town (not its centre) it has even a retired air about it, as its spacious front overlooks the sea and rejoices in plenty of fresh air. Whilst we were here, the news of the death of the Governor, Sir Charles

Macartney, arrived from England, and caused deep regret in the place. Close by the Government House is a fine bronze statue of a former Governor, Sir Edward Barnes, K.C.B., &c., &c. Further south there is a handsome light-house, signal, and clock tower, built as an Italian campanile. It looks well, and serves the three useful purposes named. There are several relics of the good, homely, Dutch people here. What ugly churches they built, and what thick walls everywhere! There is no harbour for shipping, which have to lie in the open roadstead. There is a small boat harbour, however, which revived memories with me of many years back. I was last in Colombo in December 1822 when I was a ship boy, fifteen years of age; and when looking at the harbour after so long a lapse of years, I recognised the very spot on which I, and four boy boatmates, were washed on shore when our boat upset whilst pulling off to our ship in a gale of wind, on Christmas day. I also saw in the mind's eye the kind and anxious friends who stood on the beach, urging the natives to swim through the boiling surf and support us through it. And when we landed there was quite an amicable battle amongst the European gentlemen as to who should have a young sea-dog for a guest. I fell to the kindly lot of a good-hearted six-feet-two Grenadier major, who took me to his quarters, gave me the first warm bath I ever recollected to have taken, and then clothed my young Lilliputian form in his Brobdagnagian clothes—"a world too wide for my young shanks." I cannot help laughing now as to the figure I must have cut with the tall Major's trousers brought up to my neck, around which the then long waistbands were twisted twice, and with slits cut where the pockets were, through which were thrust my naked arms, at once made me a complete suit. Heighho! those were happy days, when hard physical labour gave a zest to youthful life! How good is God to man in giving him pleasure in labour! And the pleasure derived from real, physical labour is the sweetest, because most needed in this world. A great consoling truth is that conveyed in the maxim (Longfellow's I believe) that "labour is holy!"

The native town is not quite so dirty as those I have seen in India, but there is need for a free exercise of the scavenger's broom. Colombo is said to be the most English-looking town in the East, yet notwithstanding its being clean and tidy, it does not, in my opinion, resemble one. The English shops are pretty much the same as ours. We put up at the Royal Hotel, close to the Governor's house. It is, externally, a very pretentious-looking building. It is elevated on a high plinth, and

a proportionate number of steps lead to the entrance portico. It has a front verandah overlooking the street, and is altogether a hotel which, from its external appearance, would win the preference of a traveller; but alight at the steps, and not one of the lazy servants, who are idling at the door, will help you in with your luggage; get inside, and you find dark and dirty rooms; the bedrooms are in two long wings, which overlook a filthy court-yard, filled with quacking ducks and gobbling turkeys; the rooms are miserably furnished; the doors won't shut without using burglarious force, and then you find the locks won't act, and the bolts won't shoot. The food is bad, and the cooking is only more infamous than the attendance. As an excuse for this state of things, we were told that the master had recently died, and the chief butler managed (!) the business. This hotel has a branch house at Galle Face for quiet people—probably newly married couples, who live on air and hydromel.

Colombo supports a very good and commodious reading-room, where I went to hunt up Bombay news. As I could not see any one to whom to introduce myself, I sat down, and was soon deep in the columns of the *Times of India*. During my wanderings I was surprised at the number of places in which I found the familiar broad-sheet. Fully one-half of the Dutch in Java read English, and in all the large towns they have handsome clubs or reading-rooms, where I always found the *Times of India* on their tables, in company with joyous, dear old *Punch*, the *Illustrated London News*, and a large brotherhood of other newspapers. Let me here entreat keepers of reading-rooms to entertain a friendly feeling towards a traveller if he drops in to slake his thirst for knowledge at some newspaper spring where he hopes to gather tidings of home. He will appreciate and feel grateful for the kindness. Whilst I had my nose deep buried in the newspaper, a gentleman came in, got a book, sat down, and for a little time was taking stock of me. How instinctively one can feel this when submitting to the ordeal! I wonder what he thought of me after his mental investigation? I thought kindly; and I know I blessed him as a good and polite gentleman for not putting that supercilious question—May I ask, Sir, if you are a member of this Club? No such rude fate awaited me; so after reading my fill of news I went on my way rejoicing.

TOM CRINGLE.

October 7th, 1864.

COLOMBO TO KANDY.

No. XXXI.

We left at 6 A. M. on the 30th September for Kandy (72 miles), with plenty of room in the carriage. The driver was a very respectably dressed Englishman, who told me that he was doing very well—that he had been in the army, but had purchased his discharge. He was a good-looking young fellow, and was evidently the envied possessor of many a heart the owner of which would throw *sheeps-eyes* at him, and sometimes he at them, as we passed along the road. He would conscientiously, no doubt, have taken oath that not a soul but himself and the fair damsels saw these telegrams of the eyes; but if he should ever read these pages, let me assure him that I saw them all.

When we got through the long straggling suburbs of the native quarter, and reached the open country, the road was high banked, with rice-fields on either side; in some places there were large expanses covered with water. I enquired of the driver about the drainage, which he said was very bad, owing, as I could see, to the rivers being nearly level with the surface of the fields. It is surprising that we don't find a greater use made of wind-mill pumps in the East, where the alternation of the land and sea breezes would always ensure a costless motor-power, sufficiently constant for drainage and irrigation purposes. On we went, the houses of the natives not so clean and tidy as on the Galle road, and the natives themselves dirty, squalid, and ugly. The good-looking, pleasing features, and nicely oiled and combed hair we saw on the coast road were entirely absent here. Is this owing to the sea-breezes and sea-bathing—with a dash of the Arab blood hinted at before, and greater exemption from cooly labour? I think so. We here saw the very dark, unmixed low caste natives such as we notice in some parts of the Concan and the Deccan hill-tribes. I could not learn correctly whether these people are indigenous to Ceylon, or whether they are descended from imported labour blood from the continent of India. They have the same scared, degraded look, but many of them, the young women especially, have beautiful, although mournfully beseeching eyes, which inspires a desire in the traveller to know more of their race, and of the tyranny which for ages past must have wrought so wonderful a physical change. No other race but this, that I have seen, has such painfully plaintive eyes. When we would throw to their children a few half-pence they would stare at it on the ground as if reflecting

whether such human kindness were really intended for them, or was it a snare for their ruin? Where tyranny has graven its hopeless marks of despair on the human face, what ages of kindness it takes to remove them! A writer with great truth somewhere says, "There is a self-love in tyranny which would break a world to pieces to make a stool to sit on."

As we get farther from the flat coast lands, we notice some of the most perfect spade-work, on the terrace system of rice cultivation, it is possible to conceive. We look up a long forest glade; at the end is an abrupt rise in the ground, generally in the shape of a segment of a circle. This is cut into an exact ascending flight of terrace steps, on each of which is the young rice crop, like a short pile carpet of emerald velvet. This practice is everywhere repeated where the rice ground becomes steep.

The beautiful little black draught bullocks we saw, were pictures of beauty, so sleek and shining were their glossy coats. They are mostly black, which enhances their appearance. I was at first quite at a loss to account for animals performing hard cart labour looking so fine and sleek; but on going up a hill in the coach, I came on a group of people, who were witnessing a young bullock being drenched with liquid from a bamboo which had one side slived off like a pen. As the coach halted, I went to see what was going on, and then learned, for the first time, that the drenches I had so often seen administered was a decoction of cocoanut and gingelly seed after the oil had been expressed; it is made in a tub, and then given to the animal as a drench; for, strange to say, the cattle don't like it, although it makes them strong and sleek. Every man who owns a bullock or cow must mark it for identification in case it be stolen. This rule has been the parent of some of the most beautiful and strange patterns one can conceive. None but a dreamy opium-eater could ever attempt to trace them in words—the pencil only can do them justice; in most cases the pattern is clipped in so as to fill up both the back and sides of the animal; and there were some few which were clipped all over the body; but the work is done with much taste and beauty, otherwise it would not be worth observation. Its general character is scroll work and arrow heads, and looks so strange and uncommon as immediately to attract a stranger's attention.

At 11 A. M. we arrived at the rest-house at Ambepussee* where we had a very good breakfast, which is memorable from the

* The railway has, since our visit, been opened to Ambepussèe; the remainder of the journey to Kandy is performed by coach as before.

fact of there being on the table one of the finest briskets of corned beef I ever saw. Such well-regulated lean and fat days that bullock must have had! so regular were the layers of fat and lean. It was sublime!

It is from Ambepussee (thirty-two miles from Colombo) that the ascent to the Pass of Kaduganava gradually commences, until we arrive within three miles of the summit; the road then becomes as steep as the Bhore Ghaut road leading to Poona, and we often attached extra horses to assist us up. The mountains, being granite, do not exhibit that lofty, abrupt, often marvellously grand, scenery as do the escarped trap mountains of Western India over which we reach the Deccan. The coach-proprietors have a very good and humane practice of sending on a spare horse, with special harness for the work, to assist in pulling over any piece of newly-laid road metal. The subject of the ghaut road proper was the general theme of our remarks. Although there were deep ravines and precipitous cliffs alongside the road, up the Pass (or Ghaut as we should term it), yet there was not the least attempt at forming a parapet wall to prevent a vehicle from going over. Many years ago (but not a traditional number) a stage-coach was going down the Pass when something happened to frighten the horses, and over they all went—horses, coach, and passengers. But providentially a large stump of a tree caught the coach, and held it and the horses half suspended in the air. The passengers got out with only a few trifling bruises. Among the latter was a celebrated painter of the day (I could not get his name), perhaps it was Daniels, then taking his celebrated sketches of Ceylon. However, the horses were madly plunging, and snorting with terror, as they hung half suspended over the yawning gulf beneath. Aid quickly arrived from some road-makers in the vicinity, but the artist begged of them not to disturb the scene until he had transferred it to his portfolio! The horses and carriage were afterwards got up, strange to say, little the worse for the mishap. At one part of the ascent a huge mass of granite had, ages ago, tumbled from its giddy height on to, what was then, the bridle road up the Pass; and the Engineer was forced to carry the road over this spot occupied by the block of granite. A tradition then existed among the Kandyans that their kingdom could not fall until a bullock were driven through this hill of stone, which stood like a lion in the Pass of Kaduganava; and until a bridge should be built at Peredenia over the river Mahawelli-gunga, the banks of which, at the site of the bridge, are high and precipitous. The British executed both—the stone they tunnelled, and the

bridge was made in one span over the river. It is an under-trussed lattice bridge, 200 feet by 40 feet, and so constructed, that any one piece can be taken out and replaced when repairs are required; it is four miles from Kandy. But its chief fame lies in its having, at first, been made wholly of sandal-wood. What a burnt offering this bridge would make for a Buddhist bonze! Thus the block of granite was tunnelled and the Mahawelli-gunga bridged over—all by energy and perseverance—those British levers by which so many Asiatic prophecies have been outflanked and brought to nought; and let us hope that future prophets will look a little beyond their own circumscribed range of vision before they predict limits to the march of civilization, and whose predictions can be crumbled to dust by the stroke of a Viceroy's pen, or the conquering march of a Napier or a Havelock.

But we must return to the mountain pass of Kadaganava. The steep part is three miles long, and on the summit a tall monument is erected with the following inscription:—

"CAPTAIN DAWSON,—During the government of Sir Edward "Barnes, K.C.B., &c., commanding Royal Engineers, Ceylon, "whose science and skill planned and executed this road, and other "works of public utility, died at Colombo, 28th March 1829. By "subscription this monument was erected to his memory by his "friends and admirers." It is to be regretted that his friends and admirers did not so construct the above inscription as to show more plainly to the reader which of the two constructed the road —Captain Dawson, or Sir Edward Barnes.

Our Bhore Ghaut cart road is two miles longer, is a better road, and was more difficult to construct; it was about three years in hand, and was opened about the middle of 1830. The Kandy road was commenced in 1820, and was not completely finished in 1831. Perhaps labour was not available, as the Ceylonese are only excelled in laziness by the Javanese.

The base of the monument is 1,800 feet above sea level, and is at the 60th mile-stone from Colombo. If I should ever chance to become Governor of Ceylon, I should order the monument to Captain Dawson, R.E., to be taken down to furnish (in part) materials for a rough parapet on the precipitous side of the road up the Pass. A stranger is struck dumb with astonishment at the absence of such protection to the lives of those who travel up or down the Pass. Let me describe one place. On the way down, directly the coach passes through the rock tunnel already spoken of, there is, straight before the horses' heads, a sheer down-fall precipice—to go over which is *certain* death; well, there is not so much as a pebble put as a parapet, although the

width of the road is very limited, and turns to the right so sharp and abruptly, as to nearly run back parallel with the road just passed over above. The lightning and thunder is often very severe about the Pass, and it is fairly within the bounds of probability that a blinding flash of lightning, followed by a crash of thunder, might frighten horses and cause them to bolt off: if such should happen no skill in the driver could avert the danger of going over the cliff, as the road is steep and curves very abruptly. In passing down the Ghaut I often noticed occasions that, were the drag chain to break, we should have been in great danger. This state of things is a positive disgrace to the government; and like Sidney Smith's bishop on a railway, when a governor shall be whirled over the precipice and be killed, the parapet wall will be erected. It is only doing justice to the excellent English drivers of the stage-coaches to say, that, with the exception already related, no accident has yet happened, but I can answer for the precipice, that *it* is all ready for one, either on a night of pitchy darkness, or in broad noonday.

As we ascended the road it forcibly reminded me of the Bhore Ghaut, by seeing the busy hives of men blasting out a shelf from the mountain side for the railway, which will probably be finished in three years' time. Mr. Faviell, who first had the Bhore Ghaut, is the contractor. After reaching the summit of the Pass, the road leading to Kandy, twelve miles distant, falls very rapidly, so as to make that town 1,678 feet above the level of the sea. I must, however, confess that, judging from the quick descent of the road from the summit of Kaduganava Pass to Kandy, the difference must be more than 122 feet. I should judge it to be nearer 300 feet. Just after leaving the Pass we came to a village containing a sect called Rodiyas, held in greater caste degradation than even the Mhangs of Western India—their very shadows being supposed to defile anything it falls on. The curiosity of the Major and myself was on the highest stretch to get a glimpse of them, they being reported to us as the most beautiful race in Ceylon. At last an old coffee planter called out "here is one of their women." I looked, and could have sworn that she was one of the rich Banian women just arrived from the neighbourhood of the copper-bazaar street, Bombay. They are identical in form and feature, and particularly in that peculiar want of squareness at the outer angle of the eye-brow whence the long, almond-shaped eye, appears capable of looking behind. The Ceylonese have not this peculiarity. If the history of this sect could be traced back it would, I think, be found that the children of Cutch had been stolen at some period

of their national misfortune, and taken to Ceylon by trading vessels, and there sold for a life of slavish infamy. The pharisaical purity of the Buddhist priests would no doubt place these poor children, who differed from them in creed and caste, in the most degraded class they could name, so that they might have under their own sacred feet one more rung of the human ladder by which to mount to heaven! It is to be regretted that some means are not taken to remove them to some fertile island far away from the sacred tooth of Buddha, which has been so long fastened in the side of these interesting people. The women are handsome, well-clothed, well-fed, and those I saw looked a great deal better than the dark, lantern-jawed Kandyans, who affect to despise them. Laugh ye Rodiyas, clap your hands, and spit at Buddha! The day of thine emancipation dawneth. All women can be so moulded as to stand on the verge of angelhood through the lever of love they bear to man. When they fall the error lies with man.

TOM CRINGLE.

October 9th, 1864.

KANDY.

No. XXXII.

I was much disappointed with Kandy—the scenery is very beautiful, hemmed in as it is by a triple girdle of hills about 1,600 feet high, but the houses of the town are small and mean; and take the place generally, it may be classed far below Poonah. There is a large tank here which nearly merits the title of lake. It has a small island in the middle on which formerly stood the King's harem, but which has since been converted to a powder magazine, and around the margin are the houses of the wealthy, which peep smilingly through the green trees and add greatly to the fairy richness of this pretty lake scene. The hotels are mere pot-houses, but the English shops are generally well-provided. Kandy was first historically known in the beginning of the fourteenth century, when it was the great seat of the Buddhist religion, and whence it probably spread eastward to Burmah and Pegu, to the extensive group of islands comprising the Eastern Archipelago, and on to China and Japan. But I witnessed the remains of Buddhist ruins at Java far exceed-

ing in their architectural and gigantic splendour any of the temples in Ceylon. For instance, the temple of Dalada in Kandy, where is kept the so-called tooth of Buddha, is of even mean appearance to what one would expect to find in an ark containing so precious-a relic; the tooth is two inches long and an inch in diameter. If we had not been told it were the god's tooth, its appearance would have suggested that some old crocodile was the former happy possessor. There is no mistake that the one now in the temple is an unmitigated sham, as it is beyond historical doubt that the Portuguese, when they conquered Kandy, carried off the tusk with the object of exacting a heavy ransom; but the then Archbishop of Goa being a man who had a wholesome hatred of idolatry (in the shape worshipped by the Buddhists) so worked on the fears of the more worldly Viceroy of the Indies—who, like a sensible man, viewed the tooth at its intrinsic money value at his bankers—that he prevailed in condemning it to destruction: the tooth was burnt as a solemn *auto da fé*, and its ashes now form part of the mud of the beautiful Rio da Goa. But the Buddhist priests found another tooth in Pegu, said to be the real, old, original one. It is a fact like this which proves to the thoughtful among mankind that (as a writer in the *Times* remarked when speaking of the natives of the east in the time of the mutiny of 1857), "there is hardly "anything that the Hindoos may not be made to believe. They "will accept with equal facility, on any or no authority, and without the least investigation, a tale of private scandal, a libel upon "a government, an astounding miracle, a new revelation, the "deification of a plant, a stream, a stone, a prophecy, the decline "of a dynasty, or the decay of a god-head, a curse, a code of "morality, or anything whatever so long as the appeal is made "directly to their faith, and reason be carefully put out of the "question. From the highest rajah to the lowest mendicant, they "yield their faith, their conscience, and their very lives to the "leader who makes the most extravagant demands upon them." The educated Hindoos will, as an example of that reason which education has armed them with, not class themselves in the degrading category described by the writer of the above.

Let us get back to Buddha's tooth. (What a funny idea!) It is now safely locked up (like St. Xavier's bones) in a shrine with three keys, one of which is kept by the English Resident of Kandy; one by certain trustees in whom this valuable church property is vested. (probably to keep a sharp look-out that the priests don't sell the lot and decamp; if we could only get them to attend school for a twelvemonth, the thing could be done—a

hint I here throw out for the benefit of a few steady members of the swell mob); and the third key is in the hands of the priests. It is now only exhibited to great people, and to the public once a year, when a great show parades the town amid a din of barbarous music, fit accompaniment to such a debasement of the human intellect. Oh, God! these men fear Thee and yet are prevented from knowing Thee by the cunning of base priests, who, in all ages, and of every creed, have been foremost in leading poor human creatures into the dark pits of superstitious error, far from Thy ennobling Majesty, great mercy, and loving-kindness to the poor as well as to the rich. The Government would do well to foster the practice of keeping this relic on view. It is now enshrined, and such a great favour is it made to get a sight of it, that the priests themselves must have a more exalted idea of its sacred character from the fact that *the Government takes part in preserving its seclusion from the gaze of the profane.* The shrine stands on a silver table, strewed with flowers of the Chumpha, in the far recesses of the Wihara. The outer case is blazing with jewels and inlaid carved ivory, within which are a number of lesser cases, until within the inner one a lotus of gold contains the canine tooth of Buddha. The outer shrine is so inlaid with precious stones, and hung over with costly chains, that they distract the attention from noting the patterns of the enrichments, and after having viewed it for half an hour, as Major Meares and myself were permitted to do, we came away with a mixed up, jumbled idea, that the shrine was in shape something like an elongated bell, with a short steeple ornament on the top: that the lights made the small room stiflingly hot, the *chumpha* flowers overpowering in their strong odour; that the priests deeply regretted the bad custom of there being any one else to restrict them from showing us the tusk, and thus earning the bright rupees so temptingly held out by us for that great privilege. These and many other emotions no doubt assailed my companion; for myself I confess to an unholy desire to steal, and run off with it to my "Uncle," and pawn it for a sufficient sum wherewith to send all our poor English orphan children to Merrie England! We went on the following morning for a long walk to see the Governor's house, which is large, and its pleasing union of Italian architecture with adaptations to suit an Indian climate, makes it very pleasing to the eye, possessing, as it does, a fine forest-clothed hill as a background. The interior walls and columns are beautifully coated with finely polished chunam, so as to rival the purest Carara marble in whiteness and polish. But its walls are not more highly-polished than is Parell House,

one of the residences of the Governor of Bombay; and the size of its principal apartments are far beyond the Government House at Kandy. At the back is a hill close to the house, with fountains, and a finely-kept flower-garden between, whilst the side of the hill has been so judiciously managed as to form a fine specimen of landscape gardening, without depriving the view of its natural forest aspect. A road from the garden strikes into a fine broad bridle path, which, for a distance of about six miles, leads to the summit and around the hill. I never recollect to have enjoyed such a beautiful and varied view as my companion (who, by-the-bye, is an enthusiastic admirer of nature), and myself enjoyed. Although Kandy will not bear a near inspection of its native portion of the town, yet when gazed on from the summit of "Lady Horton's Walk," as this hill path is called, nothing can be more enchanting. On the east side the view is even savagely grand as the eye roams over the great valley of Doombera, with the Mahawelli-gunga plunging its hurried course over its rocky path to its ocean bourne near Trincomalee; the hills behind show in bare patches, here and there, that the pioneer of the coffee-planters has invaded the dense recesses of the hill forest. But the west view is soft and romantic as we gaze on the beautiful lake, its mimic island in the middle, its margin fringed with beautiful trees, in which are embowered the bungalows of the wealthy of Kandy, and the aristocracy of Colombo. To the right are dotted temples and shrines about the town, which at this distance look lovely, decorated as they are in the tropical robe of Nature: thus seen, even the white-washed cottages, on the far side of this huge crater valley, look like fairy scenes in a picture wherein bliss and content reign undisturbed. To the right, or north hand, where nature in her mighty successive throes formed these hills, one belt after another, a triple row, which encircles Kandy like a belt, break down and leaves a huge gap. Before this opening to the north was formed, let us see in the mind's eye the red hot molten matter from the capacious crater within, yet once more upheaves from its central basin, and pressing on the girdling ring to the north, bursts through the yet uncooled belt, and pours its fiery stream into the valley below. What a sight for mortal man, if he could have stood and lived on this hill where we now are, to have seen such a mighty work fresh from our great Creator's hands! I noticed that the Ootacamund basin of the Neilgherry Hills has a similar gap to the north. So also has Aden, and Coonoor the same, but the latter in a less marked character, owing, no doubt, to the subsequent formation of the higher hills of Ootacamund.

On our walk up the gravelled path which encircles the hill, I was gratified in seeing what Sir Emerson Tennant has so faithfully given in one of the engravings of his book on the Natural History of Ceylon. An army of little leeches hear the crushing tread of our footsteps, when every one stands on its tail as it were, ready to fasten on the intruder, or hurry on in short springing leaps in chase. No one should visit Kandy without making a tour around Lady Horton's Walk. In the afternoon it rained heavily, yet we hired a bandy, and visited the Royal Botanic Gardens at Peredenia, four miles distant, which form nearly a continuous suburb all the way; and a pleasant sight it was, though rainy was the day, to see the pretty cottages of the well-to-do Europeans and Indo-Britons, who had retired from the toils of business to live here in peace and quiet. The immediate entrance to the gardens is of a rather unpretending character, but we soon found ourselves driving along a noble avenue of India-rubber trees, then a group of palms, which, although inferior in variety of species to those in the Java Botanic Gardens, yet formed a grand sight, especially the gigantic *Caryota horrida;* here also towered the talapot, the slender betel tree, and our own familiar palmyra, and the date palm; besides many others whose names I do not know. The traveller's tree with us grows full and symmetrical, yet low; but here, as in many other parts of Ceylon and Java, it grows to a height of fifty feet. The thought struck me whilst traversing these splendid gardens, that sometimes one's ignorance of botany is a cause of pleasure in the delightful surprises one meets with in the vegetable world. The gardens must be nearly two hundred acres in extent, and are washed on two sides by the Mahawelli-gunga; they were established thirty-four years ago, and have the merit of having introduced all the valuable fruits and spices of the Eastern Archipelago, the nurseries for which are in beautiful order. A gentleman with whom I made acquaintance at the hotel, told me that the Botanical Gardens had done immense good in affording information as to the best treatment of coffee; besides which they had introduced and acclimatized cloves, nutmegs, vanilla, besides a long list of foreign fruits which now grow in every garden—such as mangoes, loquats, lichens, durians, granadillas, the avocada pear, ginger, tapioca, arrow-root, &c. &c. The creepers, and great cables stretching, like the rigging of a ship, from tree to tree, is a sight to see. This place combines all the beauties of the flower garden, with the wild independent grandeur of the forest, groups of which are separated from each other, and from the floral beauties of the gardens by open glades of green

close cut turf, which is so like our own dear country, that you expect every moment to stumble on the park-keeper, with a brace of terriers at his heels! But Ceylon is immeasurably behind Java in the size, length, and beauty of its bamboos, where they grow to twenty-four inches in circumference, and are used as buckets in the eastern part of the island. Kandy has suffered many vicissitudes, and tells the usual story of Eastern potentates, its independence being laid in the dust through the crimes of its own kings. It was taken by the Portuguese in A.D. 1592, and burned by them in A.D. 1627, and again in A.D. 1637. The Dutch then took possession and occupied it, when its own inhabitants burned it in A.D. 1764. It was again partially burned by the inhabitants on the approach of the British in A.D. 1803. But we had "protected" it during the previous year, and our visit then was to bring the king, or Adigar, to book for killing certain British soldiers, and making his relations pound their children's heads in mortars after being cut off; for which the British government removed him from the toils of royalty and sent him to Burmah, and assumed the entire sovereignty of the Island; a policy which, when imitated by the really wise and good old East India Company, so shocked the delicate nerves of the British government!

Will the steamer have arrived from Suez? was the exclamation of the Major—the old skeleton in the cupboard still shook his fleshless finger in warning—so off we went, with sighs and regrets, torn from this paradise of flowers and forest wonders, like Adam, only he had his dear Eve to gladden his sad heart, and make light the thorny path he was doomed to travel, whilst that night we had to descend the Ghaut amid lightning, rain, and thunder. We dined and had a parting glass and chat with our new-found friends, after which we took our seats in the carriage and drove off—congratulating ourselves on the spare room we had inside! Our road lay the same way we had traversed in going to the gardens, when presently some one held up a lantern and called out to stop, and then entered a big, burly, old man with long white beard, his body well-wrapped in a warm coat. A large pillow was then handed in to place behind his poor old back, to soften the shocks of the carriage; many loving hands were thrust in to shake those of this Nestor of Kandy, and off we drove amid a shower of good-byes—the lustiest from a handsome young fellow of the domestic group, who, with a cheering shout called after us that father would meet "Rory" at the foot of the Pass. Opposite grey-beard sat a lady who was on her journey to Colombo. After shaking ourselves down a bit, grey-

beard kindly took the pillow from behind his back, and insisted that the lady had more need of it than he. This excited our interest in the old man, so we got into conversation. After a while he pulled from a domestic-looking basket some nice sandwiches, which we ate more in response to the feeling which prompted the offer than from any want of food, we having dined so recently. Then we had a little brandy-*pani* all round, and exchanged cigar courtesies as if we were old friends. The fine old man told us that the group he had parted from were his dear children; his wife had died two years since, the son who had shouted after us was Willie, and Rory would be sure to meet his father at the foot of the Pass; and when we at length arrived, sure enough there was Rory, who sprang to the carriage to seize and kiss his father's hand, to perform which filial act he had walked six miles, after a hard day's work in surveying estates for impatient coffee planters. I would freely have given up my seat and followed this youth to his mountain-home to know more of him had I not been with my companion. It looked so lovely —this act of strong affection for his father. It is the mother who plants these seeds of domestic felicity, which, in after-life, yield such a rich harvest of love and content. After having a pipe all round, and with many shakes of the hand, Rory bade his father adieu, and off we went; our eyelids having been jolted gently down, we had forty winks a piece, and roused up at Ambepussee, where we *had* beer, and pretended to take supper, but did not. During the rest of the journey the old gentleman was rich in relating Ceylon lore, especially in everything relating to coffee and coffee growing. It was from him I learnt that the raw berry soaked in water makes a good febrifuge for plantation fever. On arriving at the Fort we put down the kindly old veteran, who, by-the-bye, was an officer of the Artillery; who, at parting, said that if we would pay him a visit after he came from church he would take us round the town. But fortune ruled that we should not meet again one of the finest specimens of the contented wise old men I had ever seen, and which are so often to be met with, more especially among the Scotch. May his good spirit, so full of universal love and human brotherhood, meet as great a reward in the other world as the Christian spirit he exercised in this, won him the esteem and love of all who knew him. His very presence kept off the "skeleton!" The moment he was gone the phantom steamer was mentally seen entering Galle harbour, and leaving again without us! But it being the Sabbath-morn we could not leave till 6 P. M., so we went to sleep part of the day, and then again explored Colombo, but found

nothing new—perhaps from the want of not knowing where to look for it.

Our ride back to Galle through black walls of forest fifty feet high, without a break, or without meeting a solitary carriage except the corresponding one from Galle, was a dreary time. We looked at the houses containing the human beings whose happy demeanour had made the road look so cheerful by day, but now every sparkling eye was fettered with the bonds of sleep. We reached Galle at 7 A. M., and found that our "skeleton" was only a delusion born of fear, as the *Golconda* did not arrive *till nine days after!* during which time our little party consisting of a very gentlemanly Calcutta merchant and his amiable and charming wife, a rich coffee planter—brother to the Calcutta-wallah—the ever-cheerful, well-informed Major, my most agreeable companion, Mr. Porter, the banker, well known in Bombay, who was full of anecdote of celebrated people all over the world, and your old correspondent who is now writing this letter. We used to play croquet, and scream with laughter over our difficulties, on the little bit of turf *on the side of a hill*, in front of the Eglington Hotel, where we used to continue our sports so late we had to tie white handkerchiefs on to the arrows to mark their position. Whilst daily expecting the steamer I used often to try to pierce through the glare of the setting sun when taking a long last look for her in the evening, so that the retina of the eye retained the solar image, and then by looking at the green grass on the ramparts, a stream of *green mock suns* would float upwards from the line of vision, to be followed by others in succession; but if I looked for a moment on a square object, then the round sun became square, but still streamed upwards, until the decline of light stilled the optic nerve, and the strange vision ceased.

TOM CRINGLE.

October 20th, 1864.

THE NEILGHERRIES.

No. XXXIII.

I arrived in Madras from Galle, by the P. and O. Company's steamer *Golconda*, a beautiful vessel, with matchless accommodation, and a well-provided table. Captain Bazley and the officers were all one could wish, but the ship is slow. The opinion is

getting abroad that the P. and O. Company are arming their new ships with less power than they ought to do, the *Golconda* not being the only new slow ship they have lately built. In war time this would be a fatal weakness as regards *ownership*, and would often send their passengers to destinations they never contemplated.

I visited the People's Park in Madras twice, and found it much improved since my last call a twelve month ago—lots of birds in aviaries—beasts in cages; besides a fine monkey-house 40 feet in diameter and 30 feet high, around which crowds of youngsters stand delighted to watch Messieurs the Jackos at their gambols. There is a fine band-stand, and on Saturday evening I heard the Volunteers' band play, and I assure you that I have not heard any band in India which surpasses them in the excellence of their music and their finished style of playing —they are about twenty strong, and are certainly a great credit to the liberal spirit of the Madras Volunteers and to their Bandmaster.

Our departure from Madras by the 7-30 A. M. train in heavy rain and a strong North-east gale, without breakfast, was not calculated to cheer the spirits, but Providence threw my travelling companion (a Captain of the 1st Dragoon Guards stationed at Bangalore) and myself into a compartment with a handsome young fellow bound for Calicut on a shooting excursion. May his aim be as deadly as Captain Crocketts! for he is what one seldom meets now-a-days—an unaffected gentleman. He invited my companion and self to a sumptuous tiffin which did honor to the culinary skill of the cook, and spoke volumes for the large hearted liberality of the butler who packed it. Nothing was forgotten, from the sublime pastry to the cork-screw. Such pats of delicious butter! Such a tender capon—large as a turkey, one that you knew by a glance the breeder ought to have had a prize medal for. Besides which, there was a pastry which would gladden the heart of "Friar Tuck" could he have been favoured with a taste of it! So we breakfasted in a manner which really conferred honour on our hospitable young host. May his shadow never grow less! May elk and elephants always cross his path when on the hunting trail: misfortune never! *

The Madras railway is very smooth to travel on, and I was informed by Mr. Elwyn, the agent and manager, that they have

* The person alluded to was, I have since learnt, Capt. McLeod, Aide-de-Camp to H. E. the Governor.—T. C.

used the cast-iron pot-sleeper largely, and like them so well that they intend to extend the use of them still further ; if we are to judge of them by the solidity and evenness of their line I think they are right in so doing. Their stations are all nicely and commodiously built. The Madras terminus is really a building possessing great architectural merit, and is even largely enriched in decorations. One great blunder has been committed—the stores are at the terminus whilst the locomotive workshops are five miles away ; the former are neatly arranged, but they are troubled with white ants.

I was surprised to hear that Bangalore was situated on a plateau 3,000 feet above the sea level, but so it is, and yet this great elevation is reached by rail without any special locomotive power, as the same engines are used throughout the line. The line is generally level up to Jollarpett junction, 132 miles from Madras, through a poor marshy country. At the above junction one line branches off to Beypore 406 miles from Madras, by which line travellers proceed for the Shevaroy Hills with a table land of 5,000 feet elevation, Salem, the station, being 314 miles from Beypore. Coimbatore, 104 miles from Beypore, is the station to alight at for the Neilgherry Hills. From Jollarpett junction to Bangalore nearly all the 3,000 feet has to be ascended, but luckily for the Madras line, this is attained by workable gradients which are so easy that they are absolutely unnoticed by passengers who are not interested in such matters ; the severest is 1 in 68, and that is only for about half a mile. On descending, the train can run for 20 miles at a stretch without steam. I reached Bangalore in time for dinner at 7-30 at the Cubbon hotel, which is the best I had hitherto seen in India, everything perfect except the bread which is sandy—and so sandy as to be a disgrace to an hotel which in everything else is as near perfect as I believe hotels ever will be in the East. Bangalore is delightfully situated. The country slightly rolling, affording as the eminences do, well drained and healthy localities for building sites, whilst gardens smile in the dips below. The Lal-bagh public gardens, under the able management of Mr. Allen Black, is the chief lion of the station ; they comprise about 50 acres, and are laid out and kept in a manner combining both beauty and art. They are wholly supported by the Government, but require funds to give them finishing touches which would make them very beautiful. The Governor should find some means to interest the general public in their favour ; a large European population should be able to afford funds for a favorite place of resort like this. Here is a fine band-stand and a fountain, but

the water for the latter requires to be forced to the top of a tower so as to afford pressure, which it does not possess now.

The Cavalry barracks are built on a commanding eminence which renders them very conspicuous. The Assembly Rooms and Theatre are handsome. The country in and about the station is abundantly supplied with good water, and is sufficiently wooded for all ornamental and useful purposes; the roads are planted with trees on each side, and being of a sandy nature they soon dry after rain. The climate is delicious, thermometer down to two-blanket-power at night, and people not over-tender can walk about all day without any special covering. The soldiers really looked quite rosy with health, and I saw some of them working in their gardens, situated in a hollow, in a vigorous style quite refreshing to see; their little plots of ground formed quite a study—like a pretty patchwork bed-quilt. Some went in for cabbages, others for lettuce, peas had their place, and twenty other vegetables besides, but some were entirely devoted to flowers, and the whole formed a very pleasant sight to me as I looked down on the healthy picture, so full of beauty. But I think that soldiers' gardens should be on a much larger scale than at present—that the men should have more freedom in their work of cultivation which is now hampered with little bits of military martinetism which aims at making cabbages and carrots grow to tap of drum. They should be allowed to sell spare vegetables to neighbouring civilians, and pocket the money too. Then military gardening might be made a lever of great usefulness, and the men would be eager to engage in what is now a sort of self-imposed task-work to maintain health. All our choicest Indian creepers flower here in such beauty and full profusion as to leave Bombay even behind.

I think this is owing to the cold season at this elevation giving nature a rest approaching to winter at home. The children walking about, with their dear little rosy cheeks, looked very pretty, and gave me lots of work shaking hands, patting cheeks, and kissing the very little ones who hold out their rosy little lips in a manner not to be evaded. Bangalore is said to be very gay, and being within reach of Madras by rail would form a healthy home for any "old Indian" who from long residence in India, and without home ties, did not care about living in England. Labour is cheap, and so are all the chief articles of food.

Life, at even good hotels, is not very cheerful when you sit down to table with a lot of exclusive Englishmen, who being cut off from the good, easy manners, and gentlemanly bearing of our noble aristocracy, become unbearably snobbish. Such as

these look at you with exclusive wonder if you address a word to them without a formal introduction. No man of gentle birth would do this, as his education would instinctively enable him to detect the worthy from the unworthy by fair dinner-table conversation, and yet retain full command of his own independent privacy of action. How full of snobs India is—but as they read newspapers this is no business of yours—they don't trouble me much, and one good in them is that they keep my pity in an active and healthy state!

The terminus is well-planned for railway duties. One great mistake the Engineer has made in the goods shed, which is covered with galvanized corrugated iron roofing (which by-the-bye this company uses largely)—instead of rivetting the sheets together in lengths to reach from ridge to eaves, they have been either nailed or screwed down rigidly, when from the contractions and expansions of the sheets it has torn holes at the places where they are confined. I saw twenty men on the roofs soldering up the holes, but their work is all in vain, the roofing must all be taken off and rivetted, leaving an inch slot-hole to screw down by at the eaves which will give play for expansion and contraction. There are granite quarries at Bangalore where the stone is found in parallel laminated sheets from one inch and a half to eight or ten inches thick, and of lengths up to 35 feet. It is quarried very cheaply and with great ingenuity. A slab of the required breadth is lined off, and a small fire is made along the line thus marked, and after a time the fire is removed, when the separation is made by blows of a large, rather obtuse chisel along the line, when the whole length of perhaps 30 feet is separated; this can be again cross-divided into desired lengths. I saw these slabs applied to a thousand useful purposes, such as Electric Telegraph posts, road-side resting places for coolies, guard posts for angles of buildings, crossings for bridges, culverts and railway platforms, veranda posts, drain floors, sides and covers to roofs for railway gatemen's huts, with cemented joints, flooring for culverts subject to rapid scour of water, drinking tanks for cattle, staircases, door steps, besides an endless variety of odds and ends too numerous to mention. The price, I was informed, was only Rs. 3 for a slab big enough for a telegraph post.

I noticed several of the large bunded tanks which this Presidency is famous for, and from which I could observe the water is not so much used from the tank itself, as it is useful as a supply for wells at lower levels by percolation. Many English fruits grow here. I saw a small orchard of apple trees in the Lal-bagh, and I was told by Mr. Black that the trees had yielded

a crop the previous July, and I then saw them bearing a second crop of young apples which would be ripe in January.

I left Bangalore for Coimbatore by rail on October 21st, at 9 A. M., distance 253 miles, viz. to Jollarpett junction 84 miles, from thence to Coimbatore 169 miles. I arrived at the latter place at 10-15 P. M. same day, where I found a bullock shigram I had telegraphed for, awaiting my arrival. The town of Coimbatore is of course two or three miles from the station, as who ever knew a railway engineer in India who took his line close to the principal towns and cities they pass by? The country all the way down from Bangalore to Jollarpett junction is nearly all barren, with denuded granite hills covered with disrupted masses of rock, which threaten a daily fall, but these are at some little distance from the line. The culverts and bridges are open at top, the line being carried between the piers on parallel timber girders crossed by heavy 16-foot sleepers, on to which the chairs are pinned. This line had only been completed and opened in August, but it was well-constructed, and is in first rate travelling order. The line is only made for a single line of rails, although the culverts are made for a double line, but not the cuttings and embankments; there are no bridges above the character of culverts, and of over bridges there are only two, I think, in the neighbourhood of Madras. I should say that this line must be the most inexpensive yet made in India. The country between Jollarpett junction and Coimbatore is flat, open, and tolerably well-cultivated. The line crosses the Cauvery river on a long but low bridge; it being night I could not observe its detail structure.

After alighting at the Coimbatore station for the Neilgherries, the first halting place was Matepallium, 28 miles, where refreshment could be had, and from whence a saddle horse had to be sent five miles further on to the foot of the ascent. I arrived there in 10 hours from the time of leaving the railway station, the distance being 33 miles, and then quitted the gharry, here called a transit bullock cart, for a pony to carry me on to Koonoor, 10 miles. The road up to the Ghaut to Koonoor is very steep in many places, say 25 per cent. worse than our Bhore Ghaut, but is daily traversed by lots of carts and bullocks. I should say its average gradient is about 1 in 10 or 12, but the Government are now constructing a road which is to be 1 in 19, making it easy for ordinary carriages, while a railway is more than hinted at. When it is considered that *all* the wants of the European population have to be carried up the Ghaut by expensive coolie

labour, as well as every article of building material, in addition to the continual ebb and flow of visitors—the railway would undoubtedly pay. I arrived at Koonoor at 1 o'clock. This is an undulating plateau of great beauty, and is very healthy. As a residence for permanent settlers on the hills it must be without question far more favorable to health than Ootacamund, 1,594 feet higher, as the latter place is often enveloped in rain mists, which suddenly lower the temperature, and is therefore trying to weak people fresh up from the steaming hot plains. I think Ootacamund is chosen as a residence more because it is at the top of the hills, and affords loftier views into the Mysore country below (but not without lots of climbing labour), than from any superior benefits to be derived over Koonoor; in fact many things can be grown at the latter place, which will not grow at the former, very good tea, excellent coffee, and fine flavoured fruit especially, are grown here in profuse luxuriance.

One whose career in India is nearly finished must be greatly tempted to settle down at Koonoor, plant the traditional vine and figtree, and live under them; but I should fear, in my own case, that the surrounding life would be too tame and dull when the first excitement from the change of scene and climate had worn off. I here found located Mr. Sanderson, formerly Chief Engineer of the Bombay, Baroda, and Central India Railway; he is now a great coffee-planter, and a tea grower also I think. I had at his house some most excellent tea grown at Koonoor, and Mrs. Sanderson has promised to get me a few pounds to take on to Bombay.

I started from Koonoor for Ootacamund, 12 miles, at 2-30, and arrived at 6-30; the bullocks and shigram both belonged to the Indian Carrying Company, which bears a black reputation here for doing work slowly and badly. The road is tolerably broad, well-fenced at the precipice side, and in first rate order; gradient about 1 in 25; a horse with a buggy could have trotted up all the way. At the pace I went, I thought the different easy curves round the slopes of hills were never coming to an end; at length we went through a deep cutting, down hill a bit, turned to the right, and there lay Ootacamund, 200 feet below in a basin with small hills dotted about it, on the tops of which she had pitched her dwelling place. A few of the lowlier sort, or probably of those who don't like cold blasts, have built in the valleys between the hills, where the natural temperature is sufficiently cool. We pass over a wooden bridge, and oh pretty sight! there went three pretty maidens all of a row (one wearing a charming scarlet kirtle, which was just required

to make them look picturesque); on they tripped, apparently bent on a tremendous long walk, with a firm and elastic step such as you never see in the plains. A little further on I found a nice looking elderly lady (with a young companion) who had got her pony chaise across the road with locked wheels, with falling ground in front, and the two ponies getting impatient. So being now a sort of renovated Samson, I, with the aid of a passing old pensioner, seized the hind part of the carriage, and lifted it bodily round. Nice old lady very gracious, gave hearty thanks—did the young lady do the same? I'm not sure. It is a fact that middle-aged people are more polite and courteous than the young people. The young one did not look so pretty when they drove off as she did when I came to their assistance. Why wont young ladies be as natural as God made them? They would look a great deal more handsome and gracious.

I was glad to reach Sylk's hotel in time to dress for dinner, and I sat down with one of the best group of gentlemen I have ever met. They all had something to say worth listening to, and said it well. I spent another evening with them (around a blazing wood fire) with even increased enjoyment, and resolved to stay till it should unhappily be broken up by departures. Two Bombayites—Mr. Bayley, the celebrated barrister, and Dr. Scovell—were of the little social knot.

Sunday: went to church, situated on a commanding hill, and forming a striking feature in the back ground as the traveller descends the opposite side of the basin on entering Ootacamund. Style: gothic, spoilt from want of elevation, but a good comfortable church nevertheless. Service three times a day. I went to the early one at 8-30 A.M. Whilst the congregation was entering I saw a tonjon arrive with a sick lady. After the lady had been placed in church the eight bearers (dressed in grey clothing and red turbans) sought how they might while away the time; so two went to sleep, two began to mend their clothes, and the remaining four sat down to a game of cards. It put me in mind of Hogarth's wicked apprentice, with this difference, that although there were three beadles keeping order in *front* of the church, where no native would have the temerity to break the rules of decorum, yet no beadle's cane fell on the backs of these card-players. I felt sure, from visiting the spot the next day while taking a stroll through the burial-ground, that they were playing on a very suitable low grave slab which I found to be in memory of Edward Atkins, who died in 1861, aged 5[illegible] and who by a strange coincidence I discovered had been a boy shipmate of mine 42 years before!

Dr. Pope preached an excellent sermon on the duties of active charity and the admitted difficulties which surround some men, arising from their daily avocations; and he gave as an instance of the universality of the Christian Church, the admission of Cornelius, the centurion (in a mercenary band of Italians at the corrupt court of Nero), into its bosom, at the same time illustrating the temptations and difficulties he must have had to overcome before he drew near to God. I noticed that the contributions were all in money, and not by little "I-promise-to-pay" slips as in Bombay. In walking about this delightful place with the air bracing the nerves and making every drop of blood in your body dance with joy, you meet ladies on foot, ladies on horseback and in carriages; lots of old gentlemen with glowing, turkey-cock faces; little children so rosy and pretty that if they could at once be set down in Bombay I could make a small fortune by exhibiting them at a rupee a head. And I actually saw in church a fine promising boy, with *two black eyes* —I mean eyes painted after Mr. Thomas Sayers' style. This simple fact speaks volumes for the invigorating purity of the air of these mountains. One never sees such a promising sight in Bombay or even in Poona, and yet this place is within five days' reach from Bombay—a gentleman now here did it in that time, by the B.I.S.N. Co.'s vessels to Beypore and thence by rail. I would, however, advise all passengers for Beypore to land at Calicut, six miles to the north of it. It is never certain that a boat will come out at Beypore, and if not, the steamer goes on—they do not anchor there, and only lie to while a stuttering man could count forty!

A parting word on the appearance of these hills, when you get out of your gharree at the foot of the ascent, 10 miles from Koonoor, they scarce looked higher than our Khandalaghaut, when seen from the foot, but as you ascend, mile after mile, you are puzzled to find that you have scarcely diminished their altitude above you; up, up you go, winding round spur after spur, and as you get directly under some of the bolder escarpments the summit looks even more distant than when you commenced the ascent. Coffee plantations clothe the sides of the valley of the ascent, and very full of berries the plants are. At last Koonoor is reached, and it is here you first realize the luxurious comfort of these hill sanitaria. The neatly built cottages, with their smoking chimnies; gardens teeming with flowers of every hue; orchards bearing delicious oranges and other fruits, with the church spire peeping above the tree tops—everything *feels* so like home that on looking around, you are, for a moment, surprised to find the dusky natives walking about.

On the right of the road leading to Ootacamund are the Wellington Barracks, built on an elevated ridge, which, in the distance, look like the facade of a Grecian temple. The road is on an easy gradient, and curves gently round the spurs of lofty mountains with a deep valley to the left, on the other side of which you see cultivation and houses dotted about here and there. But, strange fact! the mountain-tops above your head look just as far up into space as when you viewed them at the foot of the ascent, although, in the meanwhile, you know you have ascended 5,600 feet. But you cannot help noticing that what appeared to you from below as high mountains, lie dwarfed beneath as puny hills which the eye now ranges over in the far, far distance, when catching sun-lit glimpses of the plains below. Anon a cloud sails up and caps the tops of the mountains on the other side of the valley, and rolls down their sides as fog, when, as if by magic, all the glorious prospect is shut off, and in its place is a sea of milk; this lasts for a few moments when lo! green islands appear in the white sea of mist beneath, gradually they loom out larger and larger, until only a gossamer web of the dissolving fog is left; this the wind quickly disperses, the sun shines out, and the glorious view is again lighted up in all its glory, which fills the heart with wonder and reverence for the Great Creator of such grand beauty. Even when we reach the deep cutting at the summit of the ascent, there are still giant mountains towering more than a thousand feet above Ootacamund; so those of your readers who have not visited these hills, must not imagine that the station is on a lofty plateau; on the contrary, it is nestled in a sheltered basin with little hills sprinkled about it, on which it has pleased the rich and powerful to build very pretty and comfortable-looking houses. From the Post-office flag-staff mound a fine view is obtained of this basin of Ootacamund.

Except in the sheltered ravines of the hills around, there are no trees; their summits are all bare, except a meagre clothing of green grass, but lower down in the habitable part, man has even overplanted a sort of cone-shaped Australian acacia tree, which is very pretty, but whose botanical name I could not learn. The form of these trees is such as to give great beauty to the surrounding scenery; they are planted in countless numbers, so much so as to shut out some fine views of distant mountain and valley. Down in the low bosom of the basin I have described, is a lake, not of great width, but if trees were judiciously dotted along it at commanding points it would add to its beauty. I should judge it to be about 3½ miles in circuit. It winds prettily, and is thus redeemed from any tank-like appearance were it of a round

pond form. The summits of the hills above the station, especially Dodapetta,—the highest peak of the Neilgherries, being 8,760 feet above the level of the sea—should be visited by the traveller. I went the usual pilgrimage to its summit, and although I had never been higher than 3,000 feet before, yet I felt none of that difficulty of breathing so much complained of by Alpine travellers. When the weather is clear the summit affords splendid views far into Mysore on the one hand, and away to Coimbatore, 60 miles distant, on the other. On the top of the peak is a hut 20 feet square, erected some years ago for astronomical purposes. The ferns cease to grow 30 feet below the highest point of Dodapetta, from which our party descended highly delighted with the trip. The stranger who visits here for the first time is struck with admiration at the large road-side hedges of roses; so full are they that they look like hillocks of pink and white more than green hedges. There are also high hedges of heliatrope, and the fuschias are *trees*, not plants.

Sylk's hotel would be unexceptionable if the landlord would only give bread without sand in it—an evil I have noticed in all parts of the Madras Presidency where I have yet been. The tea and coffee and the attendance is also very bad. Wines, beer, and food are unexceptionable; and the only fault with the building is that it is so hemmed in by trees, that no view is obtained beyond the compound fence.

I have just returned from a five-mile walk to the Government Gardens, which are under the superintendence of Mr. McIvor, whose acquaintance I was happy to make. He is a shrewd, clever man, full of information, and the vigorous health and beauty of every plant in the gardens reflect great credit on his industry and taste. The vast variety and beauty of the fuschias are wonderful. The bigonias and camelias are also superbly beautiful; the garden paths are edged with geraniums, heliotrope, and daisies, and there is heather enough in bloom to warm the heart of all Scotia. The gardens are situated on the side of a hill, and as you wind up the paths every terrace has its surprise of floral wonders to admire; there are two fountains supplied by catchwater tanks high up on the hill. I was kindly shown over the Chinchona nursery, where the baby plants may be seen in pots by tens of thousands, little wee things, some of them not an inch high, but which are capable of growing into a giant tree 100 feet high and 2 feet diameter in the bole. It is not intended, however, to let them grow beyond ten years, when they will be cut down to six inches above the ground so that the stump may throw off vigor-

ous new shoots, while the prostrate parent trunk and limbs will be skinned for its valuable bark, the wood sold to be burned, and the salts contained in the ashes applied to the roots it was severed from. I am surprised they do not introduce the walnut tree in India more than is done. It would grow here and at Bangalore, and thrive well. The fruit would always command a market, either for the dessert table, or to be expressed for their oil. I saw work in progress as I strolled through the gardens, which in time will make them rich in floral excellence, and show high taste in their arrangement and display. I did not visit the 400 acre Chinchona plantation, which is somewhere up in the clouds above the gardens, as my legs had had the gas taken out of them by my walk to the gardens, and in climbing the picturesque terraces up to the nurseries. But from the reports of several persons I learn that they are thriving in the greatest luxuriance. I saw some about five feet high in the nurseries, which looked very healthy. I also saw a lilliputian lake edged all round with our dear old English daisy, which had been a stranger to my sight for fifteen long years, and thus it became very dear to me ; the same of the sweet mignonette. How the sense of smell calls back remembrances of home-life in the flowers we used to pluck in happy childhood !

TOM CRINGLE.

October 26th, 1864.

COCHIN.

No. XXXIV.

I started for Cochin on the 29th October, leaving Ootacamund with regret, as we had very pleasant company at the *table d'hote* at Sylk's Hotel, where every evening a sort of reunion took place around the glowing wood fire, instructive conversation enlivening the time till we retired to bed at 10 o'clock. At Koonoor I stayed at Grey's hotel, which is situated on a hill 800 feet high, with an ascent of two miles from the road below, which leads through the station. This is a most serious task for a tired traveller, either coming up the ghaut to Koonoor, 10 miles, or down from Ootacamund, 12 miles. A good hotel near the

summit of the Koonoor ghaut would pay well. A Mr. Smith, Eurasian, has induced the Government to make over to him the use of the Travellers' Bungalows, both at Koonoor, and on the road from Coimbatore in the low country, at which he has established the usual dirty hostels which so disgrace India, and which he calls hotels. Even the Indian Carrying Company have better accommodation and food, but I found these bad enough. I left Koonoor on the 30th October at 8 A.M., and arrived at Matapollium, 10 miles, at 1 P. M.; after a rest and tiffin, I started from the latter place at 3 P.M. in a bullock travelling bandy on springs, for the Coimbatore Railway-station, 28 miles, where I arrived at 1 A.M. on the 31st; and left again for Beypore by the 7-30 A.M. train. When I arrived at Tiroor, 19 miles short of the Beypore terminus, I learnt, by mere accident, that just behind the station of Tiroor was the celebrated BACKWATER, navigable in boats, and running parallel with the sea shore for 200 miles, and upwards. Having always had a great desire to go along this Backwater, I bundled my traps on to the platform in great haste, sent my portmanteau by the guard on to Beypore, and embarked in a canoe, whose crew—a man and a boy—engaged to take me to Cochin, a distance of 100 miles, in four days, for Rs.4-8-0. At this time I had nothing with me in the shape of food for the trip, and nothing was procurable at the station except 3 cocoa-nuts, with which I replenished my larder. I was told there was a travellers' bungalow somewhere on the shore of the Backwater where I might obtain supplies. With this assurance I embarked at 1 P.M., not, without certain misgivings respecting the commissariat. These cargo canoes, in one of which I was now embarked, range from about half to two tons burthen; mine was of the smaller class, and drew about 9 inches of water. They are all *dug-outs* from a single teak, or mangoe tree, and are propelled by a man standing at the stern with a bamboo, the rate of progress being from two to three miles an hour. Now and again, a lift of wind enabled us to run at the rate of six miles by the aid of an old mat sail, in the middle of which was a hole big enough to drive a donkey-cart through—what sailors call an Irish reef. Thus we get along, sometimes running aground, so shallow was the water in some parts near the Ponany river, at the mouth of which I arrived at 6 P.M. Here were several pattimars at anchor, and by the large quantity of Government teak timber I saw piled in the neighbourhood, I should judge that this is a large depôt for supplying timber to the various ports to the north. Here also I saw that much-abused telegraph wire stretching its dreary length along, sus-

pended on poles for two miles over the shallows of the Ponany river. Here my man and a half made fast to the bank of the river, close to the village, to cook their supper, and as I could not procure anything eatable, I tapped one of my green cocoanuts, drank to "absent friends" in the milk, and dined off the soft nut within. But after I had gone through this all-but Barmecide feast, I felt very empty about the midriff, so had a cigar to still the cravings of the stomach; by the time this was smoked out, the crew had finished their meal, and after I had laid in a bottle of water as sea stock, we pushed off at 8 P. M. up a very narrow channel where the way was repeatedly impeded by logs of timber lying across it. The scenery had been very beautiful and tropical from the time I left the place where I embarked at Tiroor; heavy masses of cocoanut plantations, and an endless variety of other trees, lined either shore; rice fields showed on the salient pieces of reclaimed land like patches of emerald green; the water was alive with fish, which ever and anon leaped out of the way of our canoe, whilst white and brown colored kingfishers —a colour I had never seen before—were poising in the air ready to pounce on them during their short aerial flight; and on either margin of the water were varieties of the crane tribe wading about with long strides, and nearly as long bills, fishing "on their own hook." Sometimes the canoe would glide along banks clothed with reed grass, ten feet high—fit hiding place for a panther to have made a grab from. It was pleasant, after the sun had hidden his glaring face behind the trees, to sit on the thwart with a cigar, to hear the gentle ripple against the bow, and feel the cooling breeze fan the cheek after such a hot day as we had had; and could I have had a companion with whom to exchange thoughts, together with a moderately stored larder, it would have been delightful. The night drew on, and was so intensely dark that our canoe appeared to be entering a black tunnel as we threaded our way through masses of overhanging trees, and as I sat bareheaded my hair was often combed back by branches of trees overhanging the water, when presently a large glaring light ahead would suddenly appear, as if waved by demons, beckoning us on the road to destruction. On, on went the canoe, with its chirruping ripple, till we came abreast of the flaring flambeau, when we found men fishing; which was done simply by picking up from the reedy margin of the water the fish which had been silly enough to jump out of their "native element" after the light. After a sleepless, watchful night, I sat up in the early morning—the gastric juices had long ago disposed of the young cocoanuts I had eaten on the previous evening, and

was then beating the tocsin of hunger on my empty stomach, which was somewhat appeased by being told that in two hours we should reach the travellers' bungalow; and after what appeared a weary long way we at length bumped on the shore immediately beneath the wished-for house of rest and feasting at Maroondy. I jumped ashore with glad haste, ran to the bungalow, looked in and beheld—nothing but bricks and mortar! I asked for the Messman in charge; he had gone somewhere on a visit. Neither my boatmen, nor the villagers, could speak a word of Hindustani. Were there any plantains? No. To make them understand me when I enquired for plantains, I had to draw, with a piece of chalk, a tree of that kind, with the fruit I longed for hanging in luscious bunches nearly as big as the tree itself, before I could make them comprehend my wants. Had they any eggs? I drew an egg, which, for shape and size, would have deceived any Dame Partlet in a barn yard; but all shook their heads as to its significance, except one young fellow, who, to my great joy, ran off towards the huts of the village, and in a short time returned with—a roll of betel leaf! At last I had to fall back on that Cosmopolitan resource of the tongueless—*signs*. Let the reader imagine a man like myself weighing 14 stone, and six feet high, reduced by hunger to the necessity of squatting down, pretending to lay an egg, and like a rooster, getting up to cackle the glad tidings, as hens are wont to do! This pantomime, though degrading, met with the success it deserved: each of the village dunces wondered at his neighbour's ignorance, and one man promised to get me a dozen, but after waiting fully an hour, he returned with six poor little things which a British hen would have been ashamed to own. These I boiled in the rice-water of my canoe-men, divided them into three messes of breakfast, dinner, and supper, and on we went through the remainder of the day until the crew landed in the evening to cook their usual meal. After starting again we turned an angle of the backwater, when, to my great joy, I saw one of the fast pulling cabin-boats of Cochin, the crew of which were cooking their supper on the shore. I hailed to ask if they were bound to Cochin?—Yes, they were. What would they charge to take me on?—Ten rupees. I offered five, which they refused, as being ridiculously low. Whereupon I told my canoe-men to proceed, when presently I noticed one of the Cochin men was following at a distance to see if I relented, and as I did not, the fellow came up and agreed to take me. So I gladly exchanged my canoe for the ten-oared row boat, lighted my candle, and read for three hours to while away time. Whilst so

employed, and when the boat was leaping and springing to the hearty pull of the rowers, a *something* sprung into the boat close to my head, put out the light, and thudded about on the boards of the cabin quite scaring me. I rushed through the cabin-door, and found that the boatmen upon hearing the din within the cabin had all jumped overboard. At length I got a light, and lo! the noisy intruder was a fine heavy fish a foot long, which I at once ordered to be grilled for supper. After a night made restless by still unappeased hunger, and by the boat frequently running ashore in the dark, I awoke at 6 A.M. just as we were entering one of the most lovely bay harbours in the world. To my right front lay Cochin, with its quaint old Dutch-built houses, signal tower, churches, merchants' offices, and wharves (alongside one of which lay a 1,000-ton ship), from whence, looking south, the eye drank in the charming picture of the wood-fringed shore, extending over a loop-sweep of thirty miles, till the view ended at Vypeen Point on the north, opposite Cochin town. This charming bay has an average depth of 32 feet water (in some places in the centre there is 52 feet) with a clay bottom, of which more in my next letter. But before I close this one, I should like to hazard a theory on the curiously formed channel called the Backwater, which, I am informed, is navigable for 150 miles to the south, and the same distance to the north of Cochin Bay. I learn that there are also similar backwaters in Ceylon. But in Lower California they are of such extent and depth that whale ships have entered them from the sea, and taken whales in them.

It appeared to me as if the backwater proper commenced at Ponany, as from thence it ran parallel with the sea shore. I have never read or heard anything advanced as to the formation of backwaters behind sea beaches, but I offer the following theory as to their formation. The deposit of high beaches by the sea is a fortuitous occurrence, and requires many aids in conjunction. Whilst employed for five years in the Revenue Service over a large portion of the coast of Kent, including Romney Marsh, I had ample opportunity of watching the action of the sea on beaches, and I took such an interest in the subject that (my superior officer being sick) I was deputed to accompany Captain Washington, R.N., Hydrographer to the Admiralty, over the seaboard of Romney Marsh, when he was on the Harbour Refuge Commission. This officer expressed himself pleased with an explanation I offered as to the formation of the huge waves of shingle beach in the neighbourhood of Dungeness, which in some places reach back from the shore for four miles, where

they have been left by the sea in rolling waves as when formed centuries ago. I have seen sand left in a similar manner, and the operation is, I think, thus carried through:—On all shores, where the currents and action of the sea operate in laying on beach—either sand or shingle—one prevailing wind will deposit material on the shore, whilst another will take it off; for instance a S. W. gale, or any ordinary breeze from the same quarter will deposit large quantities of shingle on the coast of Kent, from Rye (in Sussex) to the South Forland, whereas a change of wind from the East will eat it all off again as if by some magical art; even a very light breeze has this effect, and where it goes to, or comes from, remains a puzzle to this day. I will now give the *modus operandi* by which the sea lays on a huge wave of beach (or sand) which the operations of Nature may allow to remain for countless ages. It should be premised that in any part of the world we seldom have heavy gales when the moon is in her zenith, at which time the highest tides occur. If the reverse obtained, most of the low lying shores in different parts of the globe would be worn down and flooded, and reclamations from the sea, such as is now protected by Dimchurch Wall (a large embankment of earth lately faced with stone) at the east end of Romney Marsh, which was made and handed down to us from the Romans, would be utterly ruined if covered with sea debris, while the land would not repay the cost of re-reclamation. Let us now suppose that the wind is blowing a gale from the quarter which lays shingle or sand on to the shore, the moon being within two or three days of her zenith, and the sea daily raising higher up the shore, what we will call the *service beach*, which is the usual ramp of material the increasing tides bring up to the "full," and which coastmen designate as the average level of the shore at high-water mark. Thus the gale, and the highest period of the spring tide, culminate in one great effort, and throw up, perhaps for ages, a huge ramp of beach which the sea never touches again. When the gale dies out, and the tides drop down to the neaps, a new service beach is formed, which Neptune rolls up and down the shore for perhaps eight or ten years before a similar united action of wind and sea takes place again, to repeat the operation. The celebrated backwater, which runs along such a length of the Malabar Coast, has, I think, been formed from a similar action of the sea and wind to that I have described. In the monsoon, the Western slopes of the mountains north of the Neilgherries and other mountains, drain their waters into the Ponany River, which at low water is nearly barred across its mouth with sand;

and it would be quite possible for the sea acting as I have suggested to have wholly closed its mouth at a time when there was little water in the river to oppose the operation. Then let us suppose heavy rains to succeed immediately after the mouth of the Ponany River had been barred up with a broad belt of sand: the mountains pour their rivulets into the river—which runs down to seek its usual outlet in the sea, but finding its former exit closed up, the rushing stream turns to the south, its *then* lowest level, and scoops out a passage parallel with the shore. At several places I saw traces of such action (more easy to recognise than describe). There are also to be seen several places along the backwater where accumulated waters have at one time burst through the narrow strip of land separating it from the sea, which openings must have been again closed by the same agency of forces I have described. At other places the sea has evidently made breaches in the shore, and divided the continuity of the backwater, where short canals have since been made to re-unite them. Where these instances occur, the backwater curves, and is shallow owing to the sea having forced large quantities of sand through the shore beach.

If any of your readers can produce a better theory as to the formation of Backwaters, I shall only be too happy to adopt it, or if any have other facts to support the arguments here advanced, I should esteem it a favour if they would publish them.

TOM CRINGLE.

November 12th, 1864.

COCHIN HARBOUR.

No. XXXV.

Of all the places I have visited in the East, none have excited more interest in me than Cochin harbour, nor have I seen a spot which exhibits more neglect on the part of the Government. I do not think the indifference to the welfare of this port has been of a wilful, wont-see, character; but, knowing there was a sand-bar across the entrance, it has been taken for granted that it is not susceptible of removal. I hope to show that this is possible, but to do so in a mere letter, without a map, is no easy task. But I hope to bring forward "testimony of the sand," which I trust will be the means of causing this harbour to be second

to none in India. And when it is considered that, with the exception of Bombay and Carwar, we have not one port in which ships can lie with safety, from Kurrachee in the extreme north to the Hoogly in the east, the case becomes important. I do not include Trincomalee in Ceylon, as it is essentially a war harbour, quite out of the great highways of commerce. But Cochin is happily situated on the Malabar Coast, which, with the exception of the ports named above, is quite destitute of ship-harbours on either side, extending from Bombay on the north, to Galle on the south, a distance of 900 miles. With this important fact before them, it is difficult to understand why the Madras Railway Company located their northern trunk line terminus at Beypore, the river of which place is barred by rocks and sand which make it utterly beyond improvement, even as a fifth-rate harbour; and why the Railway Company passed by Cochin—which would, at a comparatively small expense, have given them a fine healthy commercial port as a terminus, and nearer to their capital, Madras—I am at a loss to guess. I understand that there is an independent company now in course of organization for the purpose of making a railway from Cochin to the Shoranoor Station on the Madras line; such a line, from a port like Cochin, must be a great success for commercial purposes, as even now, a 1,000-ton ship can enter for eight months of the year, and during the remaining four months can anchor on the waveless mud-bank of Narakel, which deserves a passing notice.

Narakel is not a port but an open roadstead to the N. N. W. of Cochin, distant 4½ miles, and can be reached thence by a branch of those wonderful water courses, the "backwater" of the Malabar Coast. There is a comfortable bungalow erected at Narakel close on the beach, for the accommodation of passengers about to embark on or landing from the steamers. This was built by Mr. Aspinwall, the partner of Scott, Brothers and Co., Cochin. Both Mr. Aspinwall and Captain Castor vie in doing good, both to Cochin, and in helping forward every one who visits it.

It may be as well to say a few words as to *why* the roadstead and sandy beach of Narakel should be still and calm as on a motionless summer day, when the furious monsoon gales are roaring outside with a heavy, forbidding sea north and south of it, and which makes any attempt at landing hopeless. Yet at Narakel *the harder it blows outside the calmer is the sea on the beach —it then merely purrs and sighs.* If there is but little sea outside there breaks on the white sandy beach little wavelets such as children like to toy and dodge with at our watering-places at home. This is owing to the existence of a mud-bank about 4½

miles long and 4,000 yards broad, and about the same distance from the beach, and when there is a very heavy sea on it disturbs and stirs up the soft mud on the outer edge of the bank, which, acting like oil on rough water, and by its great density, thoroughly stills the waves and leaves the inshore the perfect calm I have described. Ships which may have lost anchors, masts, sprung a bad leak, or otherwise become crippled, if to windward of Narakel, could not do better (I judge) than bear up for that place and stick their vessel ashore on the mud bank right abreast of the tall flag-staff. Mariners may know the place by there being an open gap or break in the dense fringe of cocoanut trees which line the shore just close to the north of the Narakel anchorage. I hear they are going to erect a lighthouse, as it is difficult to make out the flag-staff—tall though it be—amid a dense, dark background of cocoanut trees. There is a large buoy lately laid down to mark the anchorage. It is situated in the native state of Cochin, for which Captain Castor is the maritime agent and harbour master. There is a similar mud bank at Allapee, south of Cochin.

It is for the Madras Railway Company to say, whether, having made a blunder in going to Beypore, it is not better to leave that terminus to act as a feeder to their line, as well as for future extension, and at once throw all the weight of their influence and assistance in making Cochin a first rate harbour by the expenditure (in conjunction with the Government) of some £30,000, and then make it their northern terminus. I will now proceed to lay before the reader the process by which the sand-bar might be removed from the entrance of Cochin harbour at a moderate expenditure of money, with labour of the simplest kind, and which would not require large sums to be expended for skilled supervision. I would also direct the reader's special attention to the scope of the magnificent Bay within the entrance; its fine clayey holding ground; its protection to shipping from every wind that may blow; its ample depth of water; its wharf-shore accommodation, where a line-of-battle ship can lie alongside wharves extending only 40 feet from the grassy bank of the shore; and there is not less than 6,000 yards of such wharf frontage, possessing the depth as I have already stated. The shore is only six feet above the level of high water, thus affording every facility for making graving docks, which may be constructed with a readiness and cheapness that would ensure success in every branch of the undertaking.

The bay of Cochin is an elongated circle, with its flattened sides east and west, whilst, at the north and south extremities, are the gullets of the backwater, which are each navigable for

boats 150 miles from the Bay, the entrance into which from the sea on the west is well defined by a straight channel formed by Vipeen point on the north side, which is a sandy, squarefaced spit, covered with cocoanut trees. This spit is about 750 yards long on the fore-shore facing Cochin, and is bounded on the west by the sandy sea shore, and on the east by the backwater, whilst on the south side of the channel stands Cochin. The channel is one-third of a mile across to Vipeen, with a bottom of mud, and a nearly uniform depth of water of from 24 to 36 feet at low-water spring tides ; the rise and fall in the springs is 39 inches. Where this channel expands into the Bay, the anchorage has a depth of water of from 52 feet in the middle, decreasing to 22 feet, with mud bottom ; and for vessels drawing less water there is unlimited anchorage from 22 feet downwards. The most promising feature in the future of Cochin lies in the deep straight channel from Vipeen Point to the present sand bar at its exit, a distance of 2,000 yards in a W. S. W. direction. The channel shoals from 36 feet to 20, 16, 15, and 14 feet on the bar, which is of hard sand, extending only some 127 feet across, over which the depth directly increases to 20, 22, and 24 feet, with mud bottom.

It may be well to remark, that on the immediate inner and outer sides of the bar, the bottom is of " sand and mud;" thus it will be observed that the anchorage for large vessels in the Bay, and the entire deep channel leading to the bar, together with its immediate sea-face, is of mud the same as the Narakel mud roadstead farther north, thus clearly showing that the sand on the bar is *a foreign invader*, blockading this, otherwise, splendid port. In fact this harbour, like many others of lesser note along the Malabar Coast, would have been all but shut up by the flow of sand along the coast from the north, had it not possessed its fine bay and connecting backwators, which, on the ebb, sweep through the sea channel at the rate of four miles an hour, and which is increased to five and six miles in the monsoon freshes, thus keeping the channel open. It is owing to this tidal scour on the ebb that a depth of 14 and sometimes 16 feet of water is obtained on the bar. It is curious to find that sometimes there is a rise of 18 inches of water more on the bar than at the ship building yards at Cochin, thus clearly indicating that a large flow of the tide is shut out from the harbour by the bar.

THE CAUSE OF THE BAR.—To give the reader a fair idea of the position and shape of the bar, let him sketch a human foot, from a little above the ankle ; give it rather a " lark-heel," make the instep a gradual curve, without arch, to the toes ; turn

the tip of the great toe down at right angles, and stick a bullock's tongue to its outside. The *heel tread* will accurately represent the Vipeen side of the channel, in front of that will be the sandy sea-shore beach; the arch of the sole will represent a most mischievous channel, with 6 to 10 feet water, through which the ebb tide runs with great velocity (of which more anon), the flat of the foot will be the north side of the channel leading into the bay, and the slender part of the tongue, on the side of the bent down great toe, is the bar. Thus, the true sea beach is represented by the shinbone down through to the front of the heel, and all the fore part of the foot is a sandy-shoal, with the toe feeding the tongue, the thin point of which represents the bar. I have the map before me, and the likeness is almost perfect as I have described it. The true compass bearing of the Coast line (shinbone) is N.N.W. and S.S.E, and the monsoon gales come from W. to W.N.W., which would about strike a line drawn through the crown of the instep to the back of the heel. I will now try to prove to the reader's satisfaction, that nearly all the sand on our western coast comes from far to the north of Kurrachee. The action of the sea deposits sand on Vipeen Point, which sand is daily swept off it by the violent N.N.W. current, which flows out of the bay by the damaging boat channel at each ebb of the tide; thus the action of this side current spreads the sand over the shoal on the W.N.W. (the whole front of the foot), thence to the extreme point where the great toe feeds the bar proper (the tongue). If the reader has taken the trouble to draw the foot, he will at once comprehend that it is this rushing ebb stream (an off-shoot of the ebb current) which has caused the mischievous diffusion of sand from the true shore line of Vipeen over so large a space as to measure 2,000 yards from Vipeen point to the bar. It is therefore only reasonable to suppose, that if a stone and piled groyne, 700 yards in length, be made on a line drawn along the channel face of Vipeen, to a point at the bar entrance, this injurious action would cease; the groyne would retain the sand in the angle, formed within it and Vipeen beach for many years before it would be necessary to lengthen it; and I feel assured that the course of the sand-drift being guided by the groyne to a well-defined point round its extreme seaward end, together with the ample and strong flow of the scouring ebb from the Bay and Backwater, would daily sweep away to the south side such sand as might escape round the groyne when its angle shall become filled up. Timber is plentiful and cheap at Cochin, and laterite stone can be obtained, water borne, at cheap rates from a distance of 16 miles from the site of the

groyne. Labour is also cheap and plentiful on this coast. Under these favourable circumstances, I think that such a groyne may be constructed for £30,000, leaving a good outside margin. It will not require to be very broad as it will soon become clothed with sand in its north sea face, on which the sea will exert its force and action. I think the channel side of it should be close piled with timber, and driven down to within 6 feet of the pile heads so as to form a secure footing for the base of the stone groyne behind, as there will be great scouring action which will deepen the present channel. Once the sand is cut off from feeding the present bar through the action of the channel already spoken of, the sand, which now *does* feed it, would soon disappear. Thus, although the proposed groyne would not extend half way to the present bar, yet it would form a trap for the sand, and prevent injurious action from the fierce current which rushes by Vipeen Point, and to which the bar is in a great measure due. To those who may be well acquainted with the character of this part of the coast, I would observe that I have visited the famous mud-bank of Narakel, four miles N.N.W. of Vipeen Point, and I have ascertained that what sand comes along the shore of Narakel, does so *by the beach alone*, and not at a distance out beyond the mud-bank. I have also personally ascertained that immediately beyond the sand-bar of Cochin is the same character of mud as at Narakel, therefore, if by a moderate expenditure we can give a harbour to this nearly harbourless coast, it will be a great gain to both human wants and commerce, and will furnish a terminus to a large railway system, penetrating to the cotton fields of Raichore and South Eastern India; and which will gather and bring down the produce of the rich table land of Mysore, and the enormous coffee and tea yield of the Ghaut range from Cape Comorin to North Canara. This railway communication in a few years will be joined with Calcutta, and would now enable Madras and her great military depôts to receive their English mails five days earlier than they do now, if Cochin were made the port of call for the P. and O. Company's steamers—sending on the Ceylon mails in a small steamer. Here they could cheaply construct unlimited dock accommodation, its town is full of ship builders and other handicraftsmen, from whose hands there has just been launched a ship of 800 tons while another one is nearly ready. In coals and in wear and tear of their ships, they would save £30,000 per annum. With so many advantages radiating to so many interests, is it not worth while to spend £30,000 to make this harbour take the important rank and

usefulness its geographical position and mercantile importance demand? Already its exports of cocoanut oil, coir rope, and fibre is of European importance, and directly the Cochin railway is united to the Madras line; the whole coffee and tea produce of the neighbouring hills must find shipment here.

Existing Commerce of the Port of Cochin for 1863-64.

Exports	34,000 tons.
Imports in 320 square rigged vessels...	109,000 ,,
Ditto by Native craft	44,279 ,,
Total...	187,279 tons.

I will now give instances where groynes have had the effect of intercepting beach drifts, the same as I have described for Kurrachee, and which are identically applicable to Cochin.

THE PROPOSED COCHIN GROYNE—I would recommend to be made in nearly a straight line from Vipeen Point to the tip of the overlap bar at the entrance. This course will aid to scour away that part of the shoal which now trenches on to the channel leading to the bar. This part of the shoal will be washed away in a few tides by at once filling up the evil side channel, which has robbed the ebb current by diverting the waters that would otherwise have kept the channel at that point straight, and which has already caused such damage by spreading the sand so far out seaward. An old boat or two which might be bought at firewood price, should be loaded with stone ballast from ships, floated across the mouth of this channel, and sunk at once, as it is fast denuding Vipeen Point, besides spreading the sand by its mill-race current, over the main shoal which feeds the bar. The evil this boat channel has effected is worth relating. Ten years ago Vipeen point was 700 yards further out seawards, but has been gradually eaten away by this damaging side channel, taking with it thousands of cocoanut trees, a most severe loss to the poor people who owned the land. Directly this channel is filled up, Vipeen Point will again increase seawards, and I have no doubt that the bar may be considerably ameliorated at the same time. The Government should at once do this, and I have no doubt that Captain Castor, the able and practical Master Attendant of Cochin, will back my advice by his own recommendation to the same effect. The channel alluded to is not necessary as there is a wide choice of boat entrances further seaward.

I would suggest that only 700 yards of the proposed groyne be made, from Vipeen Point, in the first instance, when, with the destructive boat channel closed, the sand would flow along

the beach facing the sea, and be intercepted by the groyne, and this again would straighten and guide the scour of the ebb current on to the bar, and sweep it south-westerly into deep water. If it were then deemed necessary a further length of 700 yards might be carried seawards, which would, I feel certain, have the desired effect of keeping the harbour entrance well open for ships drawing 22 feet water. Care should also be taken to ascertain whether there be a wedge-shape space of the true coast line of mud bottom between the beach and the northernmost extension of the bar shoal. If there is such a mud piece of bottom, it will be conclusive that the shoal at its northern head has not welded itself to the true sand beach, and been fed from it. If it should be so welded or joined to the beach, a short timber groyne should be made at a north-west angle from the foot of the sandy beach so as to sever it from the shoal, which would have the effect of causing the sand to travel in its known path along the beach, and not to spread at the foot; after this had been seen to, and the bar shoal found separated from the beach, I anticipate that the whole of the shoal would quickly disappear to the southwards as soon as the first portion of the 700 yards of the proposed groyne shall have been made.

It is encouraging to remark that the Narakal roadstead, just north of Cochin harbour, is of mud up to a well-defined boundary at the very foot of the sandy slope of the beach; so also is the roadstead of Cochin immediately over the bar; so also is the channel on the inner side of the bar; the same of the channel itself, as well as the bay within, of mud; I also find that all the survey charts give mud on the off shore, the sand being exclusively confined to the beach. There is no exception to this rule unless the sand has been allowed to spread across harbour or river entrances, thus clearly showing that the sand is constrained by the tidal currents from the northwards and by the monsoon gales, to travel along the beach only; and where this ruling action has been departed from we can cure the evil by means of groynes to intercept the sand-drift and restore it to its normal course, by so guiding the ebb current, that it shall not form eddies—the wet-nurse of shoals.

I am informed that timber suitable for piles can be obtained one foot in diameter and 20 feet long at four annas per cubic foot; but supposing the cost eight annas per foot, the timber for piling 700 yards of groyne, driven close together, would only cost Rs.21,000, a mere bagatelle. Then, again, the laterite is easily quarried, and being water borne, would not be a very expensive item in the charge. There is a practice here for ships

to throw overboard all the ballast they can possibly do without, before they enter the harbour, as it saves them the expense of getting rid of it in the bay; all this ballast could be utilised in the groyne. I have only to observe that all timber used for groyne piling should be well charred, say three-quarters of an inch deep, and then dressed with two of pitch to one of boiling hot coal-tar, whilst the timber is in a hot state, which treatment would make them last for a century. They would not require either shoeing or head hooping, if the one end be well-pointed, and the head be rounded off well. The scour of the ebb against the piles would deepen the water on the channel side as fast as they were driven, thus affording water for the large stone boats to lie alongside and discharge.

I shall not close this letter until I have visited the ports between this and Goa for the purpose of verifying by actual inspection what I know, I shall really find, viz. that they are all alike choked by sand from the northwards, and require the same treatment as I have recommended for Cochin.

Since writing the above I have done so, and found that all have suffered alike from the sand-drift which travels from the north, and threads its way along the beach of deep seated bays, round rocky headlands, across harbour or river mouths, on, on it creeps (always on the beach) as certain as the daily tides which influence it. What man can do is to seize, and guide its course into deep water when it seeks to form bars at river or harbour-mouths.

TOM CRINGLE.

November 14th, 1864.

CARWAR.

No. XXXVI.

On the 3rd November I started with some friends for a trip up the Kalee Nuddee. We went on horseback from Carwar about four miles to the village of Cadybagh, on the left bank of the river, opposite the village of Sudasaghur. A great part of the way was over undulating sand-waves, and along a former bed of the river, which then ran at right angles to its present course, the old mouth of which I plainly traced to where it had been

dammed up by a high sand-wave, during a springtide gale, which caused the river to open a new channel for itself in its present course further north. There are two, or more, large sand-bars now across its mouth, but they are evidently caused by the stream emptying itself into the bay of Carwar in the face of the beach-borne sand-drift along from north to south, and not from sand brought down by the river, as I could see no trace of its presence during our sail of twenty miles up to Mallapore. Here I was surprised to find a regular block of saw-mills established by Messrs. W. Nicol & Co. The mill is built on a steep bank of the river, so that timber can be at once hauled from the water, and placed under the saws. There is a first class log-mill, two large circular saws, with all the smaller cutting tools belonging to a finished establishment, driven by a horizontal engine of 45 horse-power. But even with these aids, I did not expect to find a vessel of 150 tons burthen on the stocks under the mill roof, ready for launching. The fine lines, and excellent workmanship of this vessel, would do credit to any dockyard. On enquiry I found that this was the ninth boat built in their yard for cargo, and coast freight purposes. There are now three of them at work in Carwar harbour, whilst others have been sent to Bombay. Although the mill is built on the banks of the river, with the primeval jungle behind, yet everything has been well built, and the large airy pucka-built tiled bungalow for the mechanics is so commodious that it would let for Rs. 300 per month if in Bombay.

There is also a spacious carpenters' shop belonging to the works, and healthy tiled barracks for the native workmen. A large quantity of timber, both teak and jungle-wood, is cut to order at the mills, then shipped to Carwar, where it is loaded on to return cotton-carts for Dharwar and other places in the interior above the ghauts. I had nearly forgotten to mention that the chief part of the frame, and all the ribs and ties of the boat now on the stocks at the mill, are of iron, with special strengthening pieces to enable them to take the ground without straining.

Behind the mill, one hundred yards from the river, is the road (28 miles) leading to the Kygha Ghaut now under construction by the Bombay Contract and Building Company, through their engineer Mr. Lackland, a most worthy man, who will, I am sure, do credit to his employers. Want of labour is the chief hindrance to the completion of this road. At present there is only about four miles finished about Mallapore, but even this, although bridged, is not metalled, nor are the side drains cut. A large portion of the remainder is not yet cleared of jungle.

The road appears to be well chosen. It traverses a very gently undulating country, well adapted for draining the road, and yet not sufficiently steep to distress draught cattle.

I have never seen jungle so thick as in the country about Mallapore. It is utterly impenetrable with densely-packed jungle-wood trees and scrub, with the chinks filled up with clumps of bamboo. I rode along the intended road for a few miles until it run into the old unmade road, which is becoming overgrown with jungle. When the Kygha Ghaut road shall have been finished, it will afford great facilities for conveying timber from the forests below to the timberless districts above the ghaut. The great first effort to be made, in my opinion, should be to cut down the jungle for 200 yards on each side of the road, and burn all the refuse. This measure would ventilate the tract through which the road passes, and thus free the natives from fever, which is the dread of the whole district. It is the jungle fever which renders labour on this work so dear; and although high-priced, it is scarcely obtainable. Clearing the jungle *will pay* in several indirect ways. When this road shall have been made, there will then be two great trunk roads by which to convey the produce of South Deccan to this promising young port. The Comptah road from Dharwar should then be quietly allowed to wear itself out, when the trade would insensibly transfer itself to Carwar, the capital of North Canara. The Kalee-Nuddee for 22 miles is a fine, navigable, broad river, after the bar is passed. Its scenery is magnificent as the boat winds round wooded knolls and promontories, whose bases rest in the waters of the river, whilst the high mountain-sides farther back on either hand are clothed with large forests of bamboo, which have grown so thick as to have wholly excluded other trees. There is only one teak plantation about eight miles from Cadybagh on the left bank of the river, which has a fine promising appearance, and which shows that the soil is well calculated for growing teak; and had teak plantations been formed, as the worthless jungle was being cleared for its bamboos and firewood, they would now be approaching the period when their timber would be yielding a large revenue to the Government. Here are hundreds of thousands acres of land, the very home of the teak-tree —confessedly the best timber in the world—which should have been planted years ago, in lieu of letting the land be infested with bamboo forests so dense that they have not only excluded the growth of other trees, but are now strongly supposed to be the cause of the deadly fevers inflicted on any human being

exposed to the malignant influence of the malaria around and beneath them. Government must look the present pressing want of timber in the face, at least by planting for the future, and the sooner these mountain-sides, and the short plains at their bases, are planted with young teak, the better it will be for the future wants of the stirring times now being inaugurated in India. If the jungle refuse be burnt on the ground it would destroy the latent malaria always found on the surface of forest cleared land, and thus purify the surface, whilst the salts of the vegetable ashes would enrich the soil for young plantations of superior timber. It would also greatly improve the health of the inhabitants of the neighbouring valleys by admitting a free current of air through a district which is now dammed up with a useless forest of worthless jungle, teeming with deadly malaria.

The Messrs. Nicol & Co. have done much for the new port of Carwar and its surrounding neighbourhood. With the banks of this fine river cleared, and the beach sand-drift in the bay prevented from forming a bar across its mouth, other enterprising firms may also be induced to step into the broad arena of agricultural enterprise. Messrs. Brice & Co. planted a piece of this rich river-bank land with cotton, which came up with a promise unequalled in broad India, but the deadly malaria of the surrounding network of jungle so decimated the cultivators that the living fled away. Yet, in due season, the plants produced cotton-pods of exquisite fineness, size, and number; notwithstanding this was attained by a deadly struggle for existence with the weeds and young jungle below through which it had to pierce. Better say to a man, "here, I give you the land on this river bank on condition that you cut down all its present jungle at once, and bring it under cultivation, piece by piece, in three years." Better thus, than to let it remain a hotbed of malaria, to fill the throbbing veins of human beings with fever, which has its normal home in their emaciated frames. The natives of this district are truly miserable in their physical development—a dreary, hopeless expression of countenance—thighs and legs like jointed broomsticks, with the abdomen swelled out like the body of a spider, all from the baneful effects of malaria.

There is no valuable timber on the hills about Carwar, nor on the river banks a long way up its stream; why not give the firewood-dealers of Bombay (or any one else) leave to cut it, without charge, to supply the market? It would do good to every one concerned.

TOM CRINGLE.

November 16th, 1864.

CARWAR—*(Continued)*.

No. XXXVII.

The important position occupied by this new-found harbour has been fully recognised by our ever-vigilant Governor Sir Bartle Frere, who, it is admitted on every side, loses no opportunity of ensuring its future prosperity by a watchful attention to its present wants, as the Government, and every one interested in commercial transactions in India, view it as one of the two ports available for ships on the Malabar Coast. It is about 280 miles to the south of Bombay.

As I do not recollect to have read a description of this place, I will attempt one—more especially as I came here to verify an important fact—the flow of sand-drift along the beach from North to South—the existence of which I have found ample evidence of.

All the "sayings and doings" I had read of this place, led me to expect to find a miserable little port, where a ship could scarce swing in with safety, and one which sanguine merchants and Manchester cotton lords, who wanted to get a handy hold of cotton bales from the fruitful fields of Dharwar, wished to push into impossible utility, against the constructive laws of nature. This adverse picture was agreeably dispelled as I entered Carwar Bay on the 24th November 1864. The harbour of Bombay has many and large claims to beauty of surrounding scenery; but Carwar, in my opinion, quite equals it in the surrounding views of the magnificent bay, river, plain, and the lofty triple ranges of the Western Ghauts in the far distance, with a nearer inner circle of lower hills encompassing the bay; and it eclipses Bombay by having, within cannon range of the harbour, the long but accessable hill-range of Gothully, 1,800 feet high, overlooking the sea on one hand, and the bay, with its back ground, on the other. The day is not far distant when these hills, so open to the sea, will form sanataria for the wealthy of Bombay, from which they are only thirty hours' distant by steam-boat.

Carwar Bay (formerly called Sudashegur Bay, Sudashegur being the name of a village on the right bank of the Kalee Nuddee river near its mouth, and which flows into the middle of the bay in a N.N.W. direction) may be roughly described as a half-circle, the horns of which are Lolien Point in the Goa territory, to the North; and Carwar Head, 640 feet high, on the South; the distance from one headland to the other, by the sweep of the

bay, being eleven miles. From Lolien Point, along its boundary, the sea washes the base of high hills; the remainder of the bay, up to the right bank of the Kalee Nuddee, is a narrow strip of low land, well wooded, but the left bank of the river is bounded on the south-west by a deep and broad expanse of low land (bay-shaped), which, without doubt, was ages ago, a prolongation of Carwar Bay, but has since become silted up with sand, and is now covered with trees and brushwood. Over the whole of this surface excellent water is found by sinking wells nine feet deep. Beyond this low land is a range of hills of irregular shape and altitude, which encircle the bay, from Lolien Point to the south side of Carwar cove, and as they approach Carwar Head, they close into the shore and throw out three or four spurs, two of which have their salient bases resting in the marginal waters of the harbour shore; and where they thus close in the low, sandy, bay-shaped land already described, is to be the site of the future city of Carwar. The westernmost spur faces the south-eastern inner face of Carwar Head, and these form the mouth of Beitcul Cove, which is about a quarter of a mile long by 250 yards broad, and is barred close down to its waters on both sides by high sloping spurs on the south-east, and by the flat inner side of Carwar Head on the other side. Captain Goodfellow, R. E., the Executive Engineer of the harbour and shore works of Carwar, has a fine iron roofed bungalow on a lofty spur of Carwar Head, which overlooks the cove beneath, the whole expanse of the Bay, and the intended site of the new town, as well along the Coast, north and south. Above his house is the main signal flag-staff, of great height, from which signals may be seen from any and every point of the new settlement, and by vessels approaching the harbour and in the offing, so judiciously has it been fixed by the Master Attendant, Lieutenant Parker, late I. N.

The soundings from the extreme bight of the cove to its mouth, are in feet as follows:—1, 2, 3, 5, 7, 9, 10, on sand; and 11, 12, 13, 14, 16, 17, on mud. Beyond the immediate mouth the water deepens to 18, 19, 20, 21, 22, and up to an average of 26 feet, on a clean mud bottom, over a large area of good anchorage well protected from the S. W. monsoon, and when this changes to W., as it sometimes does, the sea is partially broken by the Oyster Rocks. The Government should lose no time in laying down Mitchell's first-class screw-moorings outside the cove, with a lighter class within it. Why ordinary anchor moorings will not answer is owing to the great depth of mud in the cove and over the anchorage outside, which is not

consistent enough as holding ground when a heavy gale is blowing from the W. and N.W.; but screw moorings can be sunk to a sufficient depth for bearing any strain. One marked advantage in this deep mud bottom is that large ships of heavy draught of water may be run boldly into the cove on the mud abreast of the pier without the least danger of straining, and then discharge cargo.

The end of the cove is shut off from the sea to the west by a strip of land a quarter mile across to Sandy Bay, and two hundred and fifty yards broad; this strip connects Carwar Head and the adjoining high land to the south-east, the point of which may be said to terminate the irregular line of hills which I have already described as encircling the bay. This strip is nearly all composed of deep sand on a laterite base, and it needs only to be seen to show that a channel formerly existed by which the daily tides flowed through the cove, causing the deep channel thus named; when this channel was open there is no doubt in my mind, that the along-shore sand drift (so often remarked on by me) at that time passed through this channel *along the beach only*, at which period the whole of this fine cove had deep water and a mud bottom. To this state of things succeeded a high spring tide hurricane or gale (such as that I have described as a probability of occurring at the Ponany river) which blocked up the through channel in Sandy Bay as we now see it, and the sand thus having no through escape, has gradually covered the floor of the cove to a depth of 10 feet, and were a canal gullet driven right through into Sandy Bay—through which the sand drift would pass as it did before the gullet was closed, the cove side mouth, or entrance of the gullet, to align with the east side of the cove and then to trend more east as it crosses the small isthmus, I would stake my existence that this obvious measure would restore this beautiful and well sheltered cove to its former great depth of water. Mr. John Fleming should personally point out this plan to the Secretary of State for India, and get the work executed at once. Thus opened through the small isthmus the cove would again clear itself of sand and remain so. The Sandy Bay end of the gullet could be boxed at the mouth and protected by piles from being choked by a heavy sea. At the period above referred to, the mouth of the Kalee Nuddee river must have entered the bay in a S.W. direction, pointing to the mouth of the cove, into which it no doubt then poured its muddy silt. The mouth of the river has since changed its embouchure to the N.N.W., and has formed a bar over which the sand travels along the beach, and

this reaching the cove, has spread a layer of it over the bottom on the south margin, along where the pier is now made. Thus, when the Carwar screw-pile-pier was in course of erection, the piles were screwed into this upper crust of sand, which in one night burst through it into the soft silt-mud beneath, and let the piles fall down several feet. There being no spare ones to meet the additional depth, the further extension of the pier had to be abandoned. It is now about 80 feet long and one hundred feet broad. It is mounted with two five-ton and two three-ton cranes, so fixed in pairs that they can be used to combine their power to lift extra heavy weights—a convenience often overlooked by engineers. The Pier has a depth of seven feet at the end at low-water spring tides. Nevertheless I think this pier is a great blunder on the part of the engineer who proposed it. It has cost £8,000 when, for one-half the money, a cofferdam might have been formed, along from the spur-point occupied by the pier, and deep foundation wharf-walls built up, the cofferdam removed, and the bottom dredged out by the steam dredge now in use in the harbour. The stuff dredged out is a mixture of sand, mud, and oyster-shell *debris* which binds like concrete: this could have been put at the back of the wall, besides earth and stone from the mountain spur which they are blasting back to make room for the 100 feet public trunk road which is to line the whole shore of Carwar, along the cove and the sweep of the bay. If 300 feet of such wharfing had been made one or even two ships could have layed alongside, and landed or shipped cargo direct on to the shore without the intervention of cargo-boats. Such a work could have been commenced at once in lieu of having to wait for twelve months to get the screw-piles for the pier out from England. The granite being blasted for the roadway could have been utilized at little cost for building the walls; the Government timber depôt at Sudasheghur, close by, could have supplied timber for the cofferdam; the mill saw in the Government workshops close to the site could have sawn it up. But more important still, it would have been the beginning of one united grand scheme, of thus wharfing the entire loop shores of the cove as the trade of the port became developed, and thus have made it equal to a wet dock, sheltered from every ripple of the ocean. It would also have familiarised the Engineers with the nature of the work, and would have formed a precedent, under one of the best Constructive Engineers in the service (Captain Goodfellow, R. E.), of the cost of the work per yard forward. At present the wharf-walls are pitched on *chance* foundations, near

which the dredging machine must never work for fear of undermining them, when they would drop into the harbour.

I would even now urge on the Government to construct some 300 lineal feet of such deep water wharf-wall, as the greater facilities given in shipping ready-pressed cotton cargoes from this port will the sooner draw to it the native shippers who now send their cotton in buggalows to Bombay.

The inner end of the cove, for a length of 100 yards, is silted up with sand (no doubt since the through channel has been closed). I would reclaim a portion of this on the west side of the cove, with a gullet channel 100 feet broad. After deep foundation wharf-walls were made, bounding the end of the cove and the gullet sides of the block to be reclaimed, they need not yet be built higher than low-water mark, the sand could be taken out of the gullet by hand, and thrown within the boundary walls of the block, and then, by setting the dredging machine to work in a straight line to the gullet, she could dredge a channel for herself so as to get in the gullet, and then make a deep trap into which the whole of the sand at the end of the cove would be tide-driven in, and then dredged out into the block under reclamation. In a year the cove and gullet faces of the reclaimed block would have deep water alongside, and speculators would buy it as it would then stand, for twenty lakhs of rupees. By making this sand-trap gullet, and keeping it well and deeply dredged out at its mouth, the whole floor of the cove would so deepen in course of time that the largest ships might lay alongside the wharves of the cove, and a commerce equal to that of Bombay might be shipped direct from railway trucks, which would then run all round the cove. There is nothing which has been here suggested which would be beyond a reasonable expenditure for so promising a port in communication with so rich a country as the plains of Dharwar in the interior; they are small preliminary works, leading to a present good (deepening the cove), and a grand united future when an extended commerce shall demand it. In concluding this subject I have only to add that if timber, or rough stone groynes, made from the granite blastings now in progress, be made in the sandy bay to the east of the cove, no more sand will flow into it; and what the groynes thus gather can be taken away and utilized for filling foundations of Town Lots already sold and paid for. It will hardly be credited in Bombay what lots of land (at high prices too) have been purchased at Carwar by her speculative inhabitants and by Bombay people.

The strip of land which separates the bight of the cove has

no doubt been gradually silted up by sandy accumulations both on Sandy Bay and Carwar Cove sides; but the final closing has evidently been effected by a gale of wind at high water, when the spring tides were at highest flow, as there is now to be seen at the crest of the beach in Sandy Bay a high sand-hillock wave to support the possibility of such action. As on every other part of the Malabar Coast, I here find the sand-drift along the beach from the north, sweeping along the bay, over the bar of the Kalee Nuddee, along the remaining circle of the shore, into the cove, where a portion of it lies piled up at the end as may be seen by the soundings. The main drift then struggles round Carwar Head into Sandy Bay, whence it has a fair start to its normal magnet point—the south.

I have now only to describe the position of the islands in the Bay, when we can get to matters on shore.

Opposite to, and a mile distant from, the mouth of the Kalee Nuddee, a mile or so on the Carwar side of the middle of the bay, is the island of Coormaghur, 180 feet high, a mile long by half a mile broad. About half a mile beyond this, to seaward, in the same compass line, is Deoghur Island, 120 feet high, and about a mile in circumference. These islands will form future sanataria, or will bristle with cannon as Harbour Defence Works. In a S. W. direction, 4,000 yards further seaward, are the Oyster Rocks, composed of two islands with protruding reefs, which, with the islands, form a breakwater, to a clean bottom mud anchorage, of 4,000 yards face, against the S.W. and N.E. monsoon gales, by shifting berth to either side. The largest of these islands is about 600 yards long, and 300 yards broad, with a height of 160 feet, on which is built the light-house, the tower of which is 40 feet high, to be yet capped with the lantern 30 feet higher—giving a total height of 230 feet above the level of the sea. The lantern had not yet arrived from England when I was there. In a south-east direction from the Oyster Rocks, distant 3,000 yards from its reef-end, to nearly a mile seaward of Carwar Head, is Elephant Island, 200 feet high, and a mile in circumference. There is a good, broad five-fathom channel between this island and Carwar Head, with only one rock to be avoided on the Elephant Island side of the channel, and which rock is marked by a buoy. Between Elephant Island and the Oyster Rocks is a free open entrance of 6½ fathoms, and between the latter and Deoghur Island is also a broad 5½ and 6 fathom channel; the whole bay, together with the channels, having a clean mud bottom. Thus a ship can enter Carwar Bay or leave it by day or night through

half a dozen broad channels under the conspicuous guidance of the lighthouse—those bound to the north passing it to port, and those bound south to the starboard hand. The red light at the Master Attendant's flagstaff, by which ships lead in to the anchorage, should have a good large solid ruby lens, with two good self-feeding argand lamps to light it up.

TOM CRINGLE.

November 20th, 1864.

CARWAR—*(Continued).*

No. XXXVIII.

Of the two large spurs I spoke of as resting on the shore of the harbour, the western one has a broad front which trends from its point, where the pier is erected, along the length of the cove. This portion has been scarped down, and its soil used to make a splendid road one hundred feet wide, which is to encircle the whole frontage of the cove and bay. Future generations will bless the memory of Sir Bartle Frere as the great road maker of his day; all the roads are made of great breadth with a view to the future wants of the place; witness also the broad roads made, and in course of making on the esplanade. The roads of Poonah have not escaped his perceptive sagacity for future requirements. They are at this time being widened to grand proportions before buildings are erected on their sides render it impossible to do so. A large portion of the spur is hard granite, cleaved with intersecting basalt dykes, which latter are nearly proof against the best tempered steel drill bars. Elevated above the escarpment thus made are other smaller ones, on the summits of which are various offices, besides the Custom House, and other temporary dwellings of the Government officials; further west, facing and overlooking the cove, and built on one of the finest sites, is the best built Traveller's bungalow I have seen in the country. It has three suites of apartments, with bathrooms, &c. &c., and is kept by a respectable Parsee shopkeeper, but his charges are so extortionately high as to be remarked on by every one who takes shelter in it.

This hill, which faces the cove, trends away west, and then to the south, on its original line, and forms the hillside boundary

of the Arbyle road leading to the Ghaut of that name, 55 miles distant from Carwar. On the east of this great spur is the land bought by the Manchester Cotton Company. A large triangular piece of paddy ground, on which is built their Press-house, containing six Nasmyth's hydraulic cotton presses, with engine, &c. ready for work, besides the workmen's barrack, mechanics' cottages, &c. Here we have another instance of the incompetence of people in England to design either factories or living-houses suitable to this climate. The Press-house is without verandahs, and cramped and confined for the work it has to do; its boilers are only separated by an open partition from the press floor; to shut it off would only stifle the firemen and engineers, yet in leaving it open there is danger from fire. The press-filling room aloft is so near a large expanse of glass roofing overhead that one nearly stoops for fear of bringing the head in contact with it, and to work under it, with our withering burning sun, is to ask a man to play the salamander. This roof will have to be taken off, and the walls raised six feet. From some unexplicable cause these premises are all shut up. Cotton is pouring into Nicol & Co.'s presses, which are hard at work, and a ship is now loading direct to England with their pressed cotton bales. The above Company offered to employ the Manchester Cotton Company's Presses,* but were refused, and there they now stand ready for work, and their European mechanics on the spot, but they are locked up waiting for some one to come from England: the arbiter of their future fate. Thus this noisy and incompetent Company, backed by a powerful interest in the House of Commons, who delighted to lay bare their imaginary grievances before a sympathising English public, who—grossly ignorant of the difficulties in the way of establishing a new port, locating natives in a new place, and constructing hundreds of miles of macadamized bridged roads through a new country stricken with fever malaria, which caused all labour to desert its work,—abuse the Bombay Government for not effecting utter impossibilities. To allay this outcry of obstruction by the Government, everything was conceded to them, which the Government had to give—they have got, for an old song price, the best site in this new port, and after a great deal of shameful neglect on their own part in not providing means and tackling for unloading their ships as they arrived with machinery, they have at last got ready for work, when home goes their manager with the key of their presses in his pocket! I do not for a moment

* These have since been purchased by Messrs. William Nicol and Company.

blame their manager. I do not even know his name; I hear him spoken well of here by every one; I merely relate facts as an illustration that, however clever Manchester men may be at home, with intelligent and skilled workmen to carry out commercial designs in a country like England, teeming with art and science, they now find that it is not so easy to do so in India. Their Managing Engineer, Mr. John Fleming, appears to have done his work well under many difficulties, and their mechanics are spoken of as well-skilled, sober, and orderly men. These could no doubt find good employment in India. On the east of the above Company's ground is the other great spur already spoken of; at the rocky base of which is the flag-staff and office of the Master-Attendant, Lieutenant Parker, late Indian Navy, (who, by the bye, is the *beau ideal* of a bold, frank, hard-working, and intelligent sailor, well up in all the marine requirements of his office). Above this office on the brow of the spur, with the great harbour road scarped from the base of it 100 feet wide, is the unbuilt-on site of the proposed manager's house of the backward Manchester Cotton Company. The foundations are in, and now it is at a dead-lock with the rest of their property. Above this again is Claremont House of Mr. Maxwell, the Managing Agent of Wm. Nicol & Co. This is a fine roomy bungalow, well ventilated-walls three feet thick, its front verandah one hundred and twenty feet long by fourteen feet broad, and end verandahs of corresponding dimensions. The view from it extending all over the harbour, with Carwar Head, the Cove, with the Bay, and its back ground of hills and mountains, is magnificent. It always has a cool breeze blowing through it, and the scarcity of flies and mosquitoes in the house is only equalled by the profuse hospitality of its master—fit servant of a princely firm. On the same spur, yet higher, is the pucka-built house of Mr. Shaw Stewart, the Collector, who is a great favorite with every one here; and farther back on the table of the spur is the Government teak-built iron-roofed house of the Magistrate, Mr. Henry Ingle, the worthy son of a worthy father. On the east foot of this spur is an iron bridge spanning a narrow creek over which a good carpenter would have thrown a rough timber bridge in a few hours, yet our Manchester Cotton Company complained so bitterly against the Bombay Government for not bridging this gutter with a speed impossible, except to the owner of Aladdin's Lamp, that the Manchester M. P.'s took up the insane cry, and thundered forth the wrong from the forum of the House of Commons—a 50 ton Nasmyth's steam-hammer to crack a flea!

If I mistake not a grand vaunt was also made, that as the Government had not made a pier by which our grumblers could land their stores, they were under the dire necessity of making one themselves, for which they unblushingly bullied Sir Charles Wood out of Rs. 4,000, for a temporary affair that could not have cost more than Rs. 500 at the outside. But they plunged into a yet deeper depth of farce than any one would believe in complaining that the only bridge made at Carwar was one of their own construction, over which the whole traffic of the settlement was carried. The reader will rightly anticipate that at the period under reference there was no traffic, and the only use made of the bridge was to enable the officers of the Manchester Cotton Company to cross a narrow nulla to get on to the spur of the hill, on the east of their ground, where they lived in tents. But the bridge? A bridge that occupied a sharp discussion in the Imperial Parliament was simply two old pieces of stout packing stuff thrown across the nullah, and planked over with old packing case boards, without even the accompanying dignity of a hand rail!

It is reported that when Sir Charles Wood sent out to ask an explanation of this serious charge of the Governor of Bombay, Sir Bartle Frere, with a caustic, silent wit, highly amusing, sent home, in reply, a *photograph* of this bridge of Pedlington, and Sir Charles must have had a hearty laugh over this addled egg which the Manchester M. P.'s had been cackling about.

On the east side of the creek is to be erected the Post and Telegraph offices, but which should be reserved for the site of the Custom House, as with all due deference to those who selected its proposed site, I would suggest its being built on the place indicated on the side of this creek. The site now marked out for the Custom House, opposite the pier, it would be madness to build on, as there is not room to swing a cat, without blasting back the granite spur so far to make room for it. It would cost as much money for the site as would half build it in a more fitting place—that place being in front of the town of Carwar, that is to be. The Custom House would then have its front to a deep water bay close up to the sandy beach; its west would be flanked by a creek which is marked out for a canal to run into the Sinkerry creek, and thus reach the Kalee Nuddee river after encircling the town; it could be made navigable for cargo boats by the erection of sand-trap groynes on the east side of its mouth, in order that it may not silt up with sand, as it is as present; but all of which silt would be scoured out the first monsoon if a groyne or two were put up as suggested. Groynes

like these can be made of any rough timber slabs. Its east side and back would be in close vicinity with all the mercantile houses, banks, and public offices of a large port; whereas the present purposed site is on an impossibly small piece of ground, and being opposite the landing pier will be so crowded with merchandize as to make the public road, which runs at the base of the pier, quite impassable. People who deal with these matters should bring enlightened and liberal views when planning the future of a new city. Messrs. Wm. Nicol and Company have wisely selected the neighbourhood of the town as the site of their presses and offices. This firm, without calling on Hercules for help, tucked up their shirt-sleeves from the beginning, and have so used their own energetic strength, that they are now as busy as bees turning out cotton bales by the hundred per day ready for shipment. In a little time the Compta native cotton merchants will send their cotton here to be pressed ready for shipment direct to England in lieu of incurring risk and loss by sending it by creeping native craft to Bombay. I have now only to say that in no part of India have I seen work carried out with more energy and skill than at this place under the Executive Engineer, Captain Goodfellow, R. E., and his assistant Lieutenant Cruickshank, R. E. The massive granite coping for the top of the column in which is to be fixed the 30 feet lantern of Carwar light-house, is the finest piece of skilled masonry one would wish to see. The ghost of Smeaton would give a smile of approval if he should visit Carwar light-house and see it. The air is cool and salubrious here, and I have not seen one musquito during my stay of ten days. Government may be excused in cases of pressing haste in allotting cheap rates for making large trunk roads leading into the interior table land, as they have done in this instance; but when the time shall come for repairing them when the repairs should be done in the true (and cheapest in the end) Telford principle. The foundation should be hand-packed with large, flat, rubble stone as the base, and thence packed up to an uniform level by wedging in thin slices of stone to prevent any pieces rocking; such a foundation should be a foot deep, and over which should be spread a three-inch coat of moorum, or the next best earth at hand, which will serve as a cushion between the base and a six-inch coat of ballast on top. A road thus made, with deep side-drains to keep it dry, will last for ever, with a maximum amount of traffic and a minimum cost for repairs. *It never wears into holes*, and has such a metal-like hard surface that heavily laden cart wheels scarce leave their mark in passing over it. If road-makers would only ask

themselves why American Indians wear *snow-shoes* to travel over the snow, in lieu of cocoanut shells strapped on to their feet, the true art of road making would never be departed from. When small pieces of stones are thrown in, higgledy piggledy for a road base, the first wet weather which sets in, the soil becomes soft, the cart wheel searches out the weakest parts, when down sink the small rubble into the wet soil, and a surface-hole is the result. The hole is repaired, which afresh sinks the yielding soil deeper, and, in the end, a road thus made will swallow as much broken metal as would Chat Moss, and as would be the cost of making two such roads on the better principle I have described.

TOM CRINGLE.

November 26th, 1864.

THE FALLS OF GAIRSUPPAH.

No. XXXIX.

Although many of your readers may have heard of these Falls, and some few may have seen them, yet to others a Jotting may prove acceptable by giving them some idea of their beauty and magnitude, and the best means of reaching them.

Having, at Carwar, met Mr. R. B. Barton, our celebrated Bombay barrister, accompanied by Mr. Hormusjee Dadabhoy, the Pleader, on their way to Honore, to defend some prisoners at the forthcoming sessions, I accompanied them with a view to visiting the Gairsuppah Falls, 40 miles from Honore. During this trip I was much impressed with the gentlemanly behaviour of Mr. Hormusjee, as well as with his extensive reading from our best authors, his retentive memory, and his appreciation of the great men who have figured in history. With a higher school than the Elphinstone Institution to have finished his education, and a lengthened visit to England to have enabled him to acquire a thorough mastery of the English language in all its idiomatic mazes, he would have made a ripe scholar.

A friend at Carwar very kindly lent us a stout pinnace, rigged with a sliding gunter mainsail, mizzen, and jib. But as no regular kalassies were to be had at Carwar, we hired eight fishermen, and a regular tindal having been furnished with the boat, we took our departure for Comptah (40 miles) at 9 P.M. on the 8th December. The land breeze, which generally blows

strongly at night at this time of the year, not having yet set in, we out oars and pulled round Carwar Head, to be ready to avail ourselves of the breeze when it should set in. But it was an hour before Æolus favoured us; we then had as much wind as our boat could carry. She was about 33 feet long, 10 feet beam, and fitted with a fixed canvass awning over the stern-sheets. When night came on, we lighted our lamp, and having spread our mattresses on the decked seats abaft, we lay down and read for a time. At length the freshening breeze put an end to it; and I was by general acclamation voted commodore, the more readily as my fellow-passengers could see that the men we had shipped for the trip were getting frightened at the strength of the wind and the pitching of the boat's bow into the short sea, always attendant on off-shore gales, or in confined waters. Our proper course lay parallel with the coast line for Comptah; but the wind did not enable us to do this by five points; thus we were forced to leave the shore and stand out to sea. Our mainsail could not be reefed, therefore we had to carry a full sail; and as the wind would often strike us in sudden gusts, I had to look sharp after the main-sheet. On one occasion a gust struck us like a blow from a hammer, and laid the boat over so much that she began to fill; I flew to the sheet and eased it off just in time to save us; but as it was, we had to set men to bail the water out. At about 3 A.M. the wind freshened so much, accompanied by a short plunging sea, that I had to take the mizzen and jib off her, but finding she would not sail well without the jib, I set it again, and on we went with as much sail set as we could stagger under, pitching very heavily, and shipping a great deal of water. Then the mast-cramp broke, and we had to lower the sail to enable us to lash the mast to the thwart, when we again made sail. I was aware I could have got into smoother water by tacking in-shore, but as the flood tide was making in a direction away from our destination, I should have drifted fast to leeward with the tide broad on the weather beam. It is also well known that the closer a mountain shore is hugged, the more severely do off-shore gusts of wind strike. All this time my companions did not at all like the gloomy aspect of affairs. I think they had viewed the trip as a sort of Cleopatrine glide along the coast; and at one time I suspect they heartily repented ever having set foot in the boat. However, in due course, streaks of daylight appeared in the east; and when the "rosy morn" showed her beautiful face on the horizon, every fear with which darkness had shackled the mind, was cast off. By the neglect of both boatmen and servants, no means of making a fire

had been brought on board—not even a solitary lucifer; we therefore tacked to stand in-shore, so as to procure fire from a boat which we saw coming out of Comptah. After this, the wind gradually died off, and we did not reach our destination till 9 P.M. of the 9th; being thus exactly 24 hours doing the 40 miles. This was owing to the failure of the land breeze—foul as it was—about 10 A.M. I often found that for days together there was no sea-breeze, and it was by the early setting in of the land-breaze in the evening that we got into Comptah as early as we did.

Comptah is at present the chief export depôt for the Dharwar cotton along this part of the coast; but as the bay is fully exposed to the sea, the cotton must eventually find its way to Carwar for shipment. There is, however, a creek into which boats can run at high water if of light draft. The light-house is erected on a bold hill in the centre of the bay, and gives a fair lead in at night. After groping about in the dark we found the entrance to the creek leading to the town, and when we reached it, if ever a place resembled Eden as described in "Martin Chuzzlewit," the bunder of Comptah was that spot. It had, when seen at night, a most desolate appearance, coupled with a smell of fever-and-ague rottenness, which would have filled Mark Tapley with drunken jollity. For two hours did we sit on the dismal-looking shore before we got coolies to carry our things to the travellers' bungalow, on the opposite side of the town, and which is situated on a hill a hundred and fifty feet above it. The bungalow was a very good one, but there was no messman. The view of Comptah from this place is very pretty, with its meandering salt-water creeks, bordered, here by heavy belts of cocoanut groves, there by the hoary banian and neem trees, with white-washed cottages peeping like pretty children through the green foliage, which quite dispelled the dreary aspect it had previously presented, when nature hides her landscape beauties beneath the mantle of night. Comptah is a town of considerable size containing many large pucka-built houses belonging to the Banian caste,—a rich branch of the community engaged in the cotton export trade. As we had arranged to go from Comptah to Honore by munchil with bearers, it was some time before we procured them. In the meanwhile, I will inform my readers what a *munchil* is. A bamboo five inches in diameter and about fifteen feet long is obtained; at four feet from either end is bolted an iron strap, with a hook on each side to which are attached chains, each eighteen inches long, connecting the ends of wooden stretch-bars of a flat ham-

mock made of canvas. The better sort are made exactly like a ship captain's cot, only smaller ; but instead of the cords called *clues*, whereby to suspend it, there are hooks fixed in the ends of the stretch-bars, to which are attached the chains to connect with the strap-hooks of the bamboo. I could make a very good munchil with ten yards of strong unbleached calico, some coir yarn to tie with, and a bamboo of the requisite strength by which to carry it.

We started at 5 P.M., after great fun in getting settled on the munchil. Mr. Barton was a long time before he would attempt it, as he felt sure his nose would rub against the bamboo pole, whilst his body was extended along the sacking ; but after several essays he got settled, and on we went. The time is not far distant when there will be a railway sweeping along this coast, with branches running up the easy slopes of the Ghauts to connect with the great trunk lines of the Deccan. Canara offers great facilities for making railways. It is as level as a bowling-green ; the rivers to cross (at broad intervals) are low and shallow, with sandy beds just fit for screw-pile viaducts or bridges, and there is generally a low range of laterite hills running along the coast from which stone for building, and abundance of moorum ballast, could be obtained. I noticed at the sides of the rice-fields there were mounds of sand, as if at some former, though not distant age, the sea had burst through its beach boundaries and covered the low-lying lands with sand, which the natives had cleared to one side so as to lay bare their fields again, after the sea had retired to its normal limits. Another theory may account for these mounds. Many of the bays and lagoons along this coast are silted up with mud, over which the sea (by wearing away a sandy sea-shore point) may have afterwards covered it with a layer of surface sand, which, when discovered by the natives, was removed, so as to bring under cultivation the rich soil beneath. The mounds have too artificial an arrangement to countenance any idea of drift sand.

All along the road are villages, and both sides are lined with noble banian trees, which grow in this part of the country with a profuse luxuriance I have not seen elsewhere ; but I learn that they do not attain so great an age as in other parts of India—perhaps there are *fast* trees as well as men who soon wear themselves out by living too fast and profusely. I think if this rich soil were tried with the celebrated Sea-Island cotton, it would grow well. We arrived at Honore at 7 P.M., and although the moon was near her full, yet the roads leading into Honore were shrouded in darkness from being over-shadowed by gigantic

banian trees, the prop-roots of which could, by a little arrangement, be converted into living rooms. One can here walk about in the middle of the day with impunity, as the roads are completely shaded by tunnel-like vistas of hoary trees, which forcibly remind one of the dark oak forests in the time of our ancient Briton forefathers, where the cruel Druid priesthood used to roast their victims in large wicker-work baskets. How is it that the priesthood of all nations under the sun have led the way in wicked, murderous cruelty, when not restrained by an enlightened laity? There are only five European officials in Honore, yet they exhibited great kindness and hospitality to us wayfarers, who, be it remembered, necessarily travelled with a very scanty kit. Through the active kindness of Mr. Campbell, the energetic Superintendent of the North Canara Police, we got provided with 24 munchil bearers, six coolies to carry provisions, and two boats, one of which was for the bearers and coolies, and in the stern floor of the other we laid our beds, and having a good light, we were very comfortable on starting for the Falls at 7 P.M. on the 11th December. The first stage is by boat on the Gairsuppah river (20 miles). We arrived at Gairsuppah at midnight, having had the tide in our favour. Here we disembarked our bearers; and when they had got the munchils ready, we spread on them a moderate amount of bedding on account of the great distance we had to go, and the weight they had to carry—Mr. Barton being 6 feet high, and weighing 14 stone, I being of the same altitude, and very near the same weight, and Mr. Hormusjee being about 7 stone. The whole distance was divided into four stages, as follow, viz., Honore to Gairsuppah (by boat) 2 stages; Gairsuppah to Mullimanny (10 miles) was the 3rd stage; and to the Falls (10 miles) the fourth stage. Thus the whole distance from Honore to the Falls is 40 miles, 20 by boat and 20 by land. Before we could get off, the bearers, who had been hastily collected, wanted to cook their food; but after a little persuasion they consented to go to Mullimanny, and there prepare their supper; so off we went from the river bank, and immediately entered a dense forest of Cimmerian darkness, the road as smooth as a table, and on a gradual ascent. The dark forbidding forest on both sides and in front appeared like an endless tunnel cut out of a gigantic matted jungle, without a solitary break in its monotony. It maintained this character till we reached an open glade of limited area at Mullimanny, where fires were lighted, and the bearers commenced their cooking. We also boiled our kettle, and had some tea; but, as it afterwards appeared, I had put into the kettle

too much tea, which caused both my companions, with sympathetic exactness truly wonderful, to eject it like Smollett's guests in Count Fathom's feast after the manner of the ancients. I had a stronger stomach, and enjoyed the refreshing beverage. After which, having nothing better to do, we made a bonfire of grass, leaves, and felled branches, and had a merry greenwood dance around it. The flare of fresh heaped-on grass would now and again light up the borders of the surrounding trees, and give the scene quite a Salvator, Sherwood Forest look, with Mr. Barton as Friar Tuck, myself as Little John, and Hormusjee as the Clerk of Copmanshurst,—Robin Hood, and the remainder of the *dramatis personæ*, being absent on their just and necessary calling of catering for our larder.

We again started about 4 A.M., the forest still maintaining its dense character, with occasional groups of giant pine trees, which attain an altitude of 150 feet before throwing out any boughs, and so straight and symmetrical are they that they look as if planing them would be an unnecessary waste of labour. These trees, as masts for ships, will bend to many a lusty gale before they are resolved into their primal elements. On we went, up the easy inclined road, at the rate of four or five miles an hour, the bearers never ceasing a moment from singing their ollapodrida songs relating to every conceivable subject, the word *hathee* (elephant) appearing to have great *weight* with them as significant of the burdens they had to carry in the persons of Mr. Barton and myself. Some of their songs were pleasing, and even musical to the ear, although few of the words could be distinguished; the refrain of all their songs being—oh-hoon, a-heen, ah-heen—sounded in every note of the gamut, and in every case with a complaining tone of lament as if exhausted nature were nearly spent. When they are temporarily at a loss for subject matter for the song the above refrain is repeated five or six times over until new ideas are gathered, when the song is continued as before. As we approached the Falls, I was surprised at not hearing the "roar of waters" as at Niagara, Montmorenci, &c., but when we arrived, at 7 A.M., at the travellers' bungalow overlooking the Falls, this absence of noise was in some measure accounted for by their position, form, locality, and above all, from the limited supply of water in the river which feeds the Falls at this time of the year. The moment we alighted, the guide led us down the slope of a deep ravine to the Rajah's Rock, where we could command a full view of the three Falls, called respectively—the Roarer on the left, the Rocket in the

centre, and the Dame Blanche on the right, as the spectator faces the Falls from the right bank of the river. In order that the reader may the more readily understand the features of the scene, I will describe them. The upper bed of the Gairsuppah river, close to the bold escarpment which forms the Falls, is full of jagged, irregular rocks, much the same as I have seen parts of the Taptee river. The water must at one time have emptied itself over a square face of rock, at right angles to the length of the river bed; but an earthquake, or other disturbing cause, has upset the rock strata, so that its cleavage now reclines at an angle of 45 degrees, with the cleavages very open. This altered state of the strata caused the river stream to penetrate the rents in the rock, and thus they were subjected to a rapid degrading process which gradually altered the position of the right-angled fall, to an oblique-faced angle of 45 degrees, in accordance with the cleavage of the rock itself. Thus the Falls stand in an oblique direction to a person standing on the right bank of the river, the bed of which is about 200 feet below its hilly boundary banks on each side. The Canara, or right bank, is the steepest, whilst the Mysore, or left bank, is comparatively flat for a considerable distance before it ascends the boundary hill beyond. The flat part is clothed with a heavy belt of jungle which is said to contain bison. There is also a travellers' bungalow on the left bank, but much further back than that where we stood, and which looked down on the Falls. The Rajah's Rock, already mentioned, is named after some Rajah who was going to build a small temple on the rocky verge of the precipitous cliff, the base of which is eleven hundred feet perpendicular depth below. This was probably intended only for a safe look-out lodge, but the only vestiges of the Rajah's intention now visible are some chisel marks, over which is placed a rude and very insecure wooden platform from which the spectator has the finest view of the Falls. I will attempt to describe them in the order in which I have already mentioned them.

The Roarer is a noisy fall, as its name indicates. Its course from the top follows in a line with the cleavage of the strata for a depth of some 300 feet, where, long, long ago, it probably tore out a shelf from the rocky escarpment whereon it played for centuries. The shelf has now become a deep whirl-hole, into which the whole volume of water empties itself; it then takes a fresh start, and finds similar, although smaller, resting places down the remaining 700 feet of its fall, but in no place does it spring clear of the rock, and it being towards the acute angle of the Falls, the sound produced by it is kept from spreading by

the face of the higher hill opposite, up which it flies, and is lost in the belt of trees which grow on the summit. This will account for us not hearing the sound of the Falls as we approached them.

The next on the right is the Rocket, which is the beauty of the place. It never fails to win the admiration of every one who visits these celebrated Falls. I will first remind the reader that the height of Niagara Falls is 150, some accounts give 164 feet, whereas, those of Gairsuppah are 900 feet, with wild mountain and forest scenery around on every side, in keeping with the view of the Falls. The Rocket owes its beauty to the volume of water poured from the river above being smaller than that of the Roarer, and also from the face of the rock over which it flows being comparatively broad and smooth. These favorable features cause this fall to cling to the nearly perpendicular face of the cliff from summit to base—900 feet. The reader can realize this beautiful sight by picturing to his mind's eye a sheet of frosted silver 100 feet broad and 900 feet deep, and in myriads of places on the face of the sheet there are beautiful elongated patches of a yet clearer white—a sort of raised basso-relievo surface—with a silvery frostness with which only the pure and uncontaminated snow on the summit of Ararat can vie. But it is only the margin of these patches—(vulgar word for such a sight! let us call them elongated zones)—that this raised appearance shows, for in their centres they lose this raised character, and therein are framed, as it were, *the rockets!* Beautiful little things which appear to the eye of the spectator about two feet long; and so like! Every one recognises the likeness. I did before I had heard its name. They do not, to my fancy, resemble the rocket when it rushes on its upward flight, but rather its beautiful offspring, born of the aëriel messenger, after it has exploded—the pretty drop-lights! And the resemblance is truer, inasmuch as, like the drop-lights from an exploded rocket, the heads point downwards in the fall, not upwards. The reader should also know that the *groundwork* of this Fall is as I have described it; there is no pellucid, transparent, or unbroken water to mar the picture I have given. It is one sheet of frosted silver, never ceasing to cling to the rock face, no part racing against another, but flowing in one magnificent sheet—swift as an arrow—yet apparently with the gliding gracefulness of a beautiful bride in her robes of purity. The myriads of little rocket-drops dart down within their loop-zones with marvellous rapidity; they are succeeded by others in panoramic succession, with swift yet graceful ease, and at the base of the mighty Fall this fairy scene is received into the soft bosom of a

deep water basin, like a lovely child enfolded by the arms of a tender mother!

The Dame Blanche Fall lies on the right of the three. It would look at night like the ghostly indistinct form of the "Maiden of the Mist," clothed in long drapery of pure white, seeking its home, with its sister Undine, in the deep water grottoes below, or like a frosted silvery thread of mist on a dark green mountain side. It was without any distinctive feature when we viewed it on the 12th December.

The deep ravine facing the Falls is alive with myriads of birds of the marten species, which dart about, now crossing each other with lightning-like rapidity, whilst others take slow, graceful flights up to the very edge of the falling waters. Large Brahminny kites soar about among the smaller birds looking not larger than sparrows, whilst the lesser ones seem like flies buzzing about on a sunny day. Some adventurous visitors clamber down the precipitous ledges of the ravine, on the Mysore side, so as to reach the bottom, and are loud in their praises as to the additional beauties revealed by viewing the Falls from below; but for my part I think that the only real reward for such toil, attended (to many people) with no small share of danger, is the bath in the capacious pool beneath the Rocket Fall. There is a book kept by the sepoy in charge of the bungalow which is full of names, whose owners have recorded their feelings of enthusiastic admiration in both prose and poetry. Some of the latter is very good, and were the Collector of the district to call for subscriptions with the intention of publishing the best pieces of both prose and poetry, an immediate and favorable response would be elicited to carry out the work—especially if a photograph of the Falls could be published in the book. Its perusal will while away an hour or so as there are some good lines of poetry in it. One writer proposes to take an Atheist to the Falls, and let them look *down*, then take him down and let him look *up*, and ask him if there is no God! A witty rejoinder is penned in the margin as to whether it would not be better to throw him over the Falls at once! I also jotted an opinion which those who run to the Falls may read. I am surprised at so many people, as it were, taking the impress of preceding minds (as is there recorded) in describing the Falls as full of awe-inspiring emotions such as Milton's Pandemonium or Martin's picture of the Deluge. I do not think there is anything about them either sublime, or to inspire awe. At the time of our visit there was just water enough to show the "Rocket" in its fullest beauty; a more rapid and full flow of

the river over the Fall would have marred that majestic calm beauty that constituted its greatest charm.

Later in the year than February, I would not advise people to take the journey. To those who can rough it, or who have money and means to command ease and shelter, the end of June would afford the *grandest* sight, when the rushing monsoon squalls flood the river, and cause it to pour a nearly unbroken storm-flood reaching from one side of the Fall escarpment to the other, a distance of 350 yards. But such a flood would most assuredly destroy the placid beauty of the Rocket, as when seen at a more quiet period (say the middle of November), although such a downpour would, no doubt, add to the blatant roar of the Roarer, and give a more defined shape to the misty "White Maid of Avenal," or to call it by its proper name, Dame Blanche.

I have only to add that the water from the Falls meanders in its lower river bed, at the base of forest-clad hills, till it reaches the village of Gairsuppah, 20 miles distant, up to the canoe navigation limit, when it becomes ocean-tidal, and navigable for boats to Honore, 20 miles further.

The travellers' bungalow on the Canara side was built by Mr. T. L. Blane, Collector of the Madras Presidency, which he has kindly placed at the disposal of visitors to the Falls. It is large and commodious, with a verandah all around and through its centre, dividing the building into two parts, each part containing two bed-rooms. Thus, however large the party, the bed-rooms could be given up to ladies, whilst the gentlemen could make shake-downs in the verandahs. The opening, caused by dividing the building into two parts, is well suited for taking the meals in as it commands a view of the Falls. The present furniture of the bungalow is comprised of one bedstead, two tables, one sound chair, and one chair with its bottom out and back dislocated. It would be well to canvass for a general subscription in each Presidency wherewith to buy a complete set of strong teak furniture, including mattresses and bolsters, together with rough strong mess kit. A steady old pensioner couple, not yet dead to a little enterprise, could then be placed in charge. In time he might grow his own vegetables, grain for horses, (of grass there would be plenty,) and with a little assistance at first, he would get horses and vehicles to send down to Gairsuppah and bring visitors up, with profit to himself and ease and comfort to them. The road is excellent for wheel carriages all the distance.

It may be useful to intending visitors if I give the distances

from Bombay, and means of travel to the Falls, which are as follows :—

	Hours.	Miles.
Bombay to Comptah by steamer	30	300
Comptah to Honore by munchil	3	12
Honore to Gairsuppah by common covered boat	6	20
Gairsuppah to the Falls by munchil	6	20

The following is a list of our expenses for three persons, including munchils, which can be borrowed from European friends, or from the Comptah town-officers by a personal application. A note sent in advance would be useful to prepare bearers, boats, &c.

Comptah to Honore 24 bearers at 8 ans.	Rs. 12	0
„ „ „ 10 bigarries 5 „	3	2
Tatoos for servants, each	2	3

From Honore to Gairsuppah you must take with you munchils, bearers, bigarries, food, &c.

2 boats (one for bearers, &c.) and back	Rs. 10	0
24 bearers	36	0
6 Bigarries	6	8
Tolls	1	8
Travellers' bungalow at the Falls	3	0
Back to Comptah	12	0

NOTE.—Bearers are entitled to 6 ans., and bigarries to 4 ans. per stage of about 10 miles, and for detention half-stage fare per day ; but travellers should be more liberal when good service is rendered. If the boats are kept at Gairsuppah for return, the nerrick demurrage is 3 as. per man (4 in each boat) and 5 ans. per boat per day. We made advances of Rs. 12 to the bearers, and Rs. 2 to the boatmen, which we afterwards gave them as presents, over and above their fare.

If possible, one boat should be sent on to Gairsuppah a few hours in advance, with munchils, bearers, bigarries, servants, and kit, so as to be all ready when the party arrives, leaving a servant and biggarie with any slight refreshment as required at Mullimanny. The post letters take five days to Carwar, Comptah, and Honore.

TOM CRINGLE.

December 17th, 1864.

GOA.

No. XL.

After returning to Carwar I again left for Goa on the 20th December, with regret, as I there met with much kind hospitality from all the European members of that infant settlement. Besides which, the place had a charm for me, because it was an infant settlement, and one, too, destined to play an important part as an export town for the large fertile districts lying beyond the Ghauts, especially when a railway shall unite the port with the Deccan, and connect it with the Great Indian Peninsula Railway, now being extended on to Raichore to meet the Madras system of railways. The authorities of Carwar also appear to work in cordial union with each other, and with the members of the mercantile community now numbered in her population.

The light-house of Goa is the best I have seen on the Malabar Coast, and is visible twenty-five miles distant. It is a flashing light, standing on a headland called Agoada Point, 200 feet high, the base of which is fortified. The lines of fortifications embrace the light-house, but this I do not consider a wise course, for should an enemy attack the place, the light-house would suffer with the rest of the works, whereas, had it been placed in a more advanced position towards the point of the headland, it would have been spared by the courtesy of war. We arrived here at 1 A.M. on December 21, and after some delay were landed by the Harbour Master's Boat, at Agoada Point, which I learn is an obliging arrangement on the part of the Goa authorities. The Commandant of the Fort would have even sent us on to Panjim (*i. e.* New Goa), had he not hourly expected the arrival of the new Governor and *suite;* as it was, he despatched a messenger to Panjim for boats. In the meantime I spread my rug on the fishy bunder slope, and slept away the time from 2 to 6 A.M., when the boat arrived to convey us to Panjim, five miles distant. Thus, when dayliglit slowly dawned forth, buildings and headlands, which had at night such an indistinct appearance, stood out in revealed reality, and the scene was really magnificent; on the north, towering above our heads was the high and rocky, bare headland of Agoada Point, with the light-house perched on its highest point, enclosed within the circumvallating walls of Fort Agoada which reach to the base of the hill. A mile or so beyond (following the sweep of the bay), is Fort El Reys, crowning the summit of a similar hill, about 150 feet high, with a covered way leading down its brow to a battery *in barbette* at its

base. It is this point on which Fort El Reys is built; and a deep sandy beach half a mile away on the opposite side, forms the entrance to a large estuary leading out of the beautiful bay called the Mar-de-Agoada, which is now under description. From fort El Reys point to the opposite sandy-shore line, is the usual sand-bar, with 10 feet at low water spring tides, with a rise and fall of about 7 feet, but there is sometimes 20 feet of water on the bar; the sand is true to its old compass course, coming from the north and going south, and forms a beautiful white beach on the south side of the Bay. All around the remaining portion the Bay has a belt of dark green cocoanut trees on its margin, with a range of low hills in the back-ground, which here encircle the bay, and forms a conspicuous terminating point called Cabo, which, with Agoada Point, form the two horns of the Mar-de-Agoada; on Cabo Point is a large building, formerly a monastery, but now converted into a fine country-residence for the Governor. The gardens surrounding the buildings are very luxuriant, and yield oranges, strawberries, grapes, and all the large variety of Indian fruits. The temperature and climate are delicious: I have never felt in better health than in Panjim. The visitor who may come to Goa should ascend the hill at the back of Panjim, whereon is built the Church of OUR LADY OF LIGHT, OR LUZ. Here he will get a beautiful view on every side, especially of the bay called Mar-de-Agoada, from Agoada Point, on which is the light-house with the batteries, and Commandant's quarters, together with the barracks, below and around the whole sweep of the bay to Cabo Point, forming the southern entrance head, a distance of not less than 10 miles.

About a mile to the east of El Reys Point, which forms the entrance to the estuary beyond the bay, is the city of New Goa, or Panjim, situated on the south side of the channel, on an island called Ilha di Goa, which is formed by this estuary, and a yet larger one further south of Cabo, called Mar de Mormugao; the river flowing into which is a truly noble stream, called Rio de Rachol, which is said to be without a sand-bar. There is also, on the extreme north of the Portuguese territory, and which forms their boundary, the Rio de Tiracol ou Pernem, south of that is the Rio de Chapora ou Calvale, having a long navigable course for boats into the heart of the Portuguese territory. The next on the south is the Mar de Agoada, with its extended estuary running past Panjim (as already described). This estuary throws off four rivers, viz., the Rio de Senquecim, Rio de Mapuca, Rio de Naroa, and the Rio de Goa; which also throw out their water branches,

like a net work, all over the country, and the last named even connects its waters with the Rio de Rachol, which flows into the Mar de Mormugao an immense bay only separated from the Mar de Agoada by the intervention of Cabo Point, which forms part of the island of Goa on which both Old Goa and Panjim are built. Still further south are the rivers Betul and Talpona. This profuse water carriage gives immense facilities for travelling and for the carriage of produce. The soil is wonderfully productive. I went the other day with Mr. Gassett, an American planter, to Cabo to enjoy the splendid views from the high headlands adjoining, which overlook the Mar de Mormugao. Here, about Dona Paulo's Bay, are quiet little sandy nooks, with fishing boats drawn up; there the snug, well-to-do, white-washed native cottage, peeping out of umbrageous groves of cocoanut trees, the merry children, screaming with laughter, as they ducked each other in the lake-still waters of the ocean, and poultry and pigs strolling about with an easy enjoyment unknown elsewhere. The village Cure came out to make his bow (for all the population nearly are Christians), and altogether it was a realised dream of the poet when describing the native villages of the South Sea Islanders. In our walks we saw some excellent gardening, and the yield was profusely abundant. Wells are dug at handy distances all over the gardens, where fresh water in abundance is obtained at a depth of eight feet, wherewith to water their crops.

I should judge the population to be very happy; the bulk of them go about with scanty clothing, but this I think is more from choice than necessity. Their wives and children are mostly pretty, and there is an absence of that life-sick, wearied cast of countenance, so much seen among the poorer Hindoo population of British India—especially the female portions of it. Yet the native subjects of Goa do not enjoy (?) that extended liberty of the subject which makes them put both civil and sanitary laws at defiance in Bombay and elsewhere.

I visited the burial-ground at Cabo, built and used by the British force of 10,000 men when they held possession of the seaboard points of Goa, to prevent the French entering India by this route in 1805. The massive laterite stone-wall which surrounds it, is as perfect as the day it was built, the laterite in this neighbourhood being the best I have anywhere seen, but the lofty arched entrance gates have long ago been despoiled of every particle of wood. The burial-ground is used for rice cultivation, and the very tomb-stones are worn down from the sharpening of native tools on them; where not culti-

vated, it is over-grown with high rank grass said to be alive with the deadly *Cobra de Capello.* If it be true, as I have heard, that the Collector of Belgaum allows an annual sum to keep it in order, I can assure him that not a pice worth of care is bestowed on it, and I do not think it is desirable to do so, for if people who build memorials over the remains of friends do not like to build deep and solid foundations for tombs, and let inscriptions into deep side panels, with an outside protection of plate-glass half an inch thick, they must expect them to fall to decay with more or less rapidity, and it is absurd to think that posterity is to keep grave-stones in repair for ever—and if not for ever, why a day! Mourners, don't build *shams* as brick and mortar expressions of your grief!

Let us go up the estuary to Panjim. If the reader thinks I can, in the space of a letter, describe this place, and Old Goa, eight miles further up the river, he is mistaken. I only have in view to mention facts and scraps, not generally found in guide books, and such inducements as shall draw my countrymen down here for a holiday now and then, and if they will only come they will be well repaid with beautiful views, fine old church architecture, and a healthy climate to take away the wrinkles of cankering care. This would be a paradise for poor pensioners of small means; to men of higher pretensions it is a Bolougne of refuge against importunate creditors in British India! House-rent, land, servants, and living are cheap, and there is always some gaiety going on to keep life from stagnating. The Portuguese are very polite, courteous, and attentive to strangers when they see enough of you to know that you are not an Adullumite. Since I have been here (that is, from the 22nd to the 30th December) and although a perfect stranger to the gentlemen of the town, I have been invited to a party to meet the out-going Governor-General, Count de Torres Noves, for the purpose of presenting a testimonial to evince the esteem in which he is so universally held. He is a very fine-looking man, full of intellectual and physical ability, sixty-four years of age, but looking ten years younger. It is to him the British Government are indebted for the permission to let our troops land and pass through the Portuguese territory in the time of the mutiny, when it became a matter of grave importance to push a force into the Belgaum Collectorate above the Western Ghauts, up to the base of which the Portuguese possessions extend. For this brave and courteous act he has never yet received any acknowledgment from the British Government, although an act of indemnity had to be passed

through the Portuguese Junta to justify the invasion of their territory by foreign troops. To him also is due the praise of opening out the resources of the country by making roads, bridges, causeways, &c., and by giving a warm welcome to British capitalists, to whom he has granted long and favorable leases of land. The soil is eminently productive, and highly suitable for planting cotton, coffee, seeds, &c., &c. I have seen coffee plants growing in Panjim only ten feet above sea-level, one of which was put in the ground in May 1863, from a pot, when only 4 inches high; this year it yielded three pounds of the finest berries in the world—berries, which an experienced planter said would command an advanced price, over Ceylon-grown coffee, equal to 20 per cent. The new Governor-General has expressly recognised the great service done by his predecessor in inviting British capitalists, and fully intends to continue the same enlightened policy.

The Portuguese Conservator of Forests, John Luiz d'Oliveira, has put an end to the devastating *Coomrie system*, which is conducted as follows. The mountain-side forest is cut down and burnt; the soil is then scratched over, the *raggi* (a dark millet) sown, the crop reaped, and the land is then deserted for 3, or perhaps 7 years—often entirely; the gain is, a miserable crop worth about Rs. 10 per acre—the loss, say, 500 trees per acre, at one rupee each,—some are worth 20 rupees, as they are of blackwood. The Goa government have now stopped this unwise and wasteful practice, as they see that had they not permitted it in the first instance the lands thus denuded could, in these coffee-growing times, have been let on leases which would have given a good helping hand in filling the vacuum in their exchequer. Yet it has been told me that British Belgaum has this year given permission to repeat this suicidal course; it should be stopped at once.

On the 22nd December Goa was all a tiptoe to receive its new Governor-General, Councillor Jose Ferreira Pestana. The Portuguese 20-gun corvette moored just above Panjim, was rigged all-a-taunto, and dressed in flags; all the vessels and boats in the river had their flags flying; the State barge, all white, with chaste gilding, and lanterns over the stern like the large old "Amirals" of three hundred years ago, while a figure of Fame blew her lusty trumpet from the bow; the crew were dressed in white duck frocks and trowsers, with red velvet caps on their heads, bearing the Portuguese Royal Arms on a silver shield in front. On shore the troops were drawn up in line, two deep, reaching from the main landing bunder opposite the Custom House, to the Governor's palace, about 200 yards distant; the Artil-

lery, with bright brass six-pounders, occupied the flank of honour to the right, and on their right were the military bands belonging to the Artillery and Cacadore Regiments. The soldiers were well dressed, clean, but not so well set up, nor with that soldierly bearing which so distinguishes the British soldier. However, I was agreeably surprised at the whole turn-out of both officers and men. The Bands quite delighted me with their neat, clean uniform, their well-found instruments, the correct time kept, and the beautiful music played; and if Bombay visitors may chance to hear them, I think they will agree with me in saying that no band in Bombay can excel them. I have heard with much pleasure one of the bands play every morning in front of the palace, when the troops are relieving guard at 8 A.M.

At length the long-expected signal is given that the steam yacht—the *Margaret Crawford*, belonging to the Honorable Rustomjee Jamsetjee Jeejeebhoy, Member of the Bombay Council, who with great courtesy placed his beautiful steamer at the disposal of the incoming and outgoing Governors—is in sight, having just rounded El Rey's Point. In five minutes she is anchored abreast of the Custom House bunder, with the Portuguese ensigns hoisted at her three mast-heads. The State bargo goes alongside, and the Count de Torres Noves comes out of the palace, attended by a numerous staff of officers, dressed in a blue and gold uniform, cocked hats and black plumes, many with orders on their breasts, who walk to the bunder, along the front of the troops, to meet the new Governor. Directly the latter plants his foot on the shore he is saluted with 19 guns, the troops present arms, the bands play some Portuguese "See the conquering hero comes," and amidst all this noise and display the two Governors walk along the line. The old Count being a general, and a soldier besides, instinctively stops when in front of the regimental colours, to which he bows with fine old soldierly devotion; the new Governor being a scholar and not a soldier, looks up with surprised attention to see what has caused the momentary pause—when on they go (I am at a window overhead and can see everything), and in five minutes they and their staff have entered the palace followed by all the black-dress-coat aristocracy of New Goa. Gruff Colonels then roar out words of command which make infantry soldiers shoulder arms, take close order, then wheel by sub-divisions to the left, and off they go to a splendid quick-step timed by the band, which sets every finger and foot of on-lookers in motion until lost in the envied distance. The Artillery limber up to the right, retire by sub-divisions from the right; the band of

the Artillery goes off with another burst of fine music, the like I have not heard since I have left the well-remembered groves of Hyde, and St. James's Parks.

In the evening a ball and supper were given at the palace to welcome the new Governor, on which occasion plenty of sweet music comes streaming out of the doors and windows, to float across the moonlit waters of the estuary, the harmonious strains strike playfully the opposite hills, and return again on its watery path to be elbowed out of existence by other streams of sweet sounds from the same fountain.

On the following morning away go Artillery and Infantry to Old Goa, in barges to give pomp to the ceremony of installation of the new Governor. Every boat and canoe are in requisition, as all the world of Panjim, together with the greater populations of the villages dotted about the quiet beautiful bays of the estuary are going to view the august ceremony. These villages—built on promontories of low hills which push their bases into the river—with their loftily-built white-washed church, perched on the hill above, just peeping out of the leafy green trees in which they are embowered—have a most enchanting look of peace and quietness, and add materially to the beauty of the river-side scenes. Presently both the Governors and staff embark in the State barge (I conclude they *are* both Governors until one lays down the functionary power of his office), and pull up the river to Old Goa, some eight miles distant, where they disembark, under the usual salute, at a bunder near the Arsenal, which leads to the triumphal arch erected to commemorate the second capture of Goa on 17th February 1510, by Alfonso Albuquerque, the Wellington of Portuguese Asia, from the Mahomedan ruler of Bejapoor. (Adilshaw, or Idul Khan, both of which titles he is known by.) This arch bears in a niche the figure of St. Catherine, who was then chosen patroness of the city. From the arch of Albuquerque a procession is formed to the Cathedral of St. Catherine, where a mass is performed, from whence the procession moves on to the Church of Bom Jesus, where is the tomb of St. Xavier. Here the Governors and all the State officers seat themselves, whilst the Royal Proclamation, which appoints the new Governor, is read, and then signed by both Governors; after which they both approach the figure of St. Xavier, which holds in its hand a sort of pastoral staff with a gold head to it; this the old Governor hands to his successor, who makes a short procession around the tomb, and then confides it to the Saint's safe keeping again. The Governors and State officers again seat themselves, but this

time the new Governor changes seats by occupying the throne-seat proper to his office, in which his predecessor was before seated. This act, joined with the Royal Proclamation, and the possession of St. Xavier's staff, strips the old Governor of every rag of power; and now whilst the troops are firing a *feu de joie*, together with a royal salute from the large guns, amidst the crashing music from all the bands, the old Governor looks on in the character of a highly-privileged visitor. The gay cavalcade now embark again and return to Panjim, with bands playing, whilst the whole estuary and river above is covered with boats bearing people who have come out of their quiet village dovecotes to see the gallant show.

I cannot pretend to give more than a few words to the buildings of old Goa; to me it looks, in its departed glory, as if God had shaken His wrathful finger over it, and decreed its downfall; there is nothing about the land in its neighbourhood to account for the fearful fever-plague that destroyed the major part of its inhabitants, and caused the remainder to leave the fated city to found a new home at Panjim, eight miles nearer the sea.

Old Goa was first founded 19 years before the arrival of Vasco de Gama at Calicut, 20th May 1498, and was taken from the Mahomedans by the famous Albuquerque, about thirty years after its foundation, and would then have been forty-nine years old, from which period its rise was sudden and prodigious, as her present ruins testify. Her fall was equally sudden, for after numbering 200,000 inhabitants, she was so devastated by death-fever that the city was finally abandoned in 1758. But a century before this her splendour had departed, notwithstanding that she had eighty churches convents and monasteries, with 30,000 *religieuse* who lived idling within their walls. But the unbridled lust of wealth and power, so invariably exhibited by the high Roman Catholic priesthood, whenever it ran its blind course, unchecked by an educated laity, clung like a fungus to the body politic and eat up its very vitals. Good God of love and humanity, what must the poor Indians of those days have thought of the soul-saving new religion, whose first lessons were of hell-fire—the last, the more tangible and terrible thumb-screw and rack of the bloody Inquisition! And these were the servants of Him, whose teachings were always founded on love and forbearing charity? I often speculate whether the world will ever forget the terrible lesson now before our eyes, in the histories of Rome, Naples, Spain and Portugal—all gallant, courageous, courteous nations, until the fatal period when their priesthood were allowed to run unchecked in a course of unbridled

greedy lust for riches and temporal power, until those nations lay prostrate in the dust, with the priestly heel on their necks, each a house divided against itself—nay their very manhood sapped and deteriorated by a long submission to an emasculated, cruel, irreligious, and imperious priesthood. But the dawn of happier days is at hand—Rome is on the threshold of a restoring vitality; Naples has been rescued and placed in healthier hands; Spain, whose whole landed property was being gradually absorbed by monastic institutions, has already applied the besom of reform, by suppressing these hives of human drones, since when, a healthy reaction has taken place. She is now reasserting her ancient manhood, and again becoming known among the comity of nations. Portugal has followed the same wise steps, with a like material progress. In 1835 she suppressed all monasteries, including those of Goa. The extinction of the monastic institutions of Goa is regretted by many kind men who take only a superficial view of their influence on the poorer classes, great numbers of whom used to be fed daily by the monks. But we have only to glance at the past, and even the present state of the capital cities and towns of the nations already alluded to, to see the result of continuous alms-giving in the crowds of beggars and idlers which abound in them; and we also know that the same remarks applied to a poor Christian population in India would tell with ten-fold force. Let us return to Old Goa.

In 1554 (16th March) the body of St. Xavier was taken from the island of Sancian, on the Coast of China, where he had died on December 2nd, 1552, to Malacca, and thence to Goa, where it was received by all the great officers of State, and deposited in the church of the College of St. Paul. It was there exposed to the sight of the people in a perfect state of preservation, until 1786, when the body was locked up in a beautiful brazen shrine, and afterwards only occasionally exhibited. The feast of St. Xavier takes place every 2nd December, but the body can only be exhibited by a special Bull from the Pope. But the good old fellow is fast going "dust to dust;" in fact he is nearly all gone, for report says there is only the head, with one foot, and a trifle or so of shinbone left. This mere wreck of the Saint has been represented to the Pope, who advises a discontinuance of the exhibition, but his votaries could not forego this pious luxury, so the HEAD OF THE CHURCH finally says, "very well, but take care you are not found out;" and thus things will go on comfortably as before. Why not make a wax figure at once, and stuff the relics of the Saint inside it, to justify and sanctify the proceedings? This would be better than exhibiting a dummy, with

only a true head, leg, and foot that is really genuine. However, many wise men think that the first man who was canonized, was the commencing cause of more sin against God, by diverting the prayer of sinners from HIM to the Saints, than all their united good works put together can undo. And the time is not distant when some Roman Catholic Luther will arise and sweep the Calendar clear of both Saints and Saintesses which now stand in such vast array to intercept the view of the one God to whom alone man should address his prayers. The Protestant Church has a few cobwebs of the same class that also want sweeping away, and the sooner the better. The shrine of St. Xavier is under three keys, one is kept by the Archbishop of Goa, another by the Governor and Senate, and the third is at Lisbon. The tomb erected to his memory is very beautiful, and the three shrines in which his mortal remains are now deposited, are said to be two of gold and the outer one of silver, the whole thickly studded with jewels, said to be worth, altogether—that is tomb, shrines, jewels, and other fixings—£300,000. Were I the Governor of Goa for six months, I would sell them off, and with the proceeds found schools wherein to teach the ignorant and superstitious population. Wax models of decrepit legs, feet, and arms belonging to votaries who were cured by miracle during the last exhibition of the Saint's body, now hang at his shrine, as an encouragement to future cripples not to despair, as there is "balm in Gilead" for them as for their predecessors. How beneficial and accommodating this must be for true believing Catholics, who limp up to a saint's shrine, kiss a toe, or may be only a finger-nail, and *hey presto!* the palsied leg stands firmly under the body, like a basaltic pillar of Staffa, whilst a heretic unbeliever has very properly to carry his lameness to the grave. What a grand thing faith is! The interior of the metropolitan Cathedral of St. Catherine is fine and grand; it is about 200 feet in length, and the nave, or body of the church, is about 80 feet broad, divided into three naves, as it were, by two rows of pillars; this does not include a row of highly decorated chapels on either side; the transept, forming a cross with the nave, is about 130 feet in length, by 50 in breadth. The height to the roof of the edifice is 80 feet. The choir, raised only three or four steps, is of the same breadth as the middle nave, that is, about 45 feet, and contrary to ordinary custom, is built east and west. It is not round at the end as is customary, but represents an oblong square; there are no side aisles around it. The altar is placed at the extremity of the choir. The altar piece is well and elaborately carved and

gilt, consisting of three rows of niches, one above the other, adorned with pillars, pilasters, and a profusion of other ornamental work, but which is toned to suit the general design. The niches in the middle row are for the statues of the three patrons, the Virgin, St. Peter, and St. Catherine. Some of the side chapels have been endowed with rich gifts by men with unquiet minds, which I thought would figure much better as funds for a college wherein to teach the hundreds of young men now idling about the streets of Panjim, living, like the Frenchman's horse, on a straw a day. Those who wish to learn more of Goa must go and inspect for themselves, as even a week's attempt at describing all that is worth seeing would fill a volume. All I can say is, that any one who will come, will be highly gratified with the place. The present Governor and his Staff, as were the last, are always glad to see, and to show courtesy, to any English gentlemen who may call to pay their respects. I have not done myself that honour as unfortunately my best Ramilies Wig, lace ruffles, and Court sword were sent on to Bombay before I thought of coming here.

On the 4th January, 1865, I returned to Bombay fully restored to health, and well pleased with my roaming trip.

TOM CRINGLE.

January 4th, 1865.

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